

ALL ABOUT Tobacco

Milton M. Sherman



Pipes

Cigars

Cigarettes

How to buy a pipe

How to blend tobacco

How to smoke a cigar

The care of tobacco products

ALL ABOUT TOBACCO

MILTON M. SHERMAN

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TOBACCO MONEY

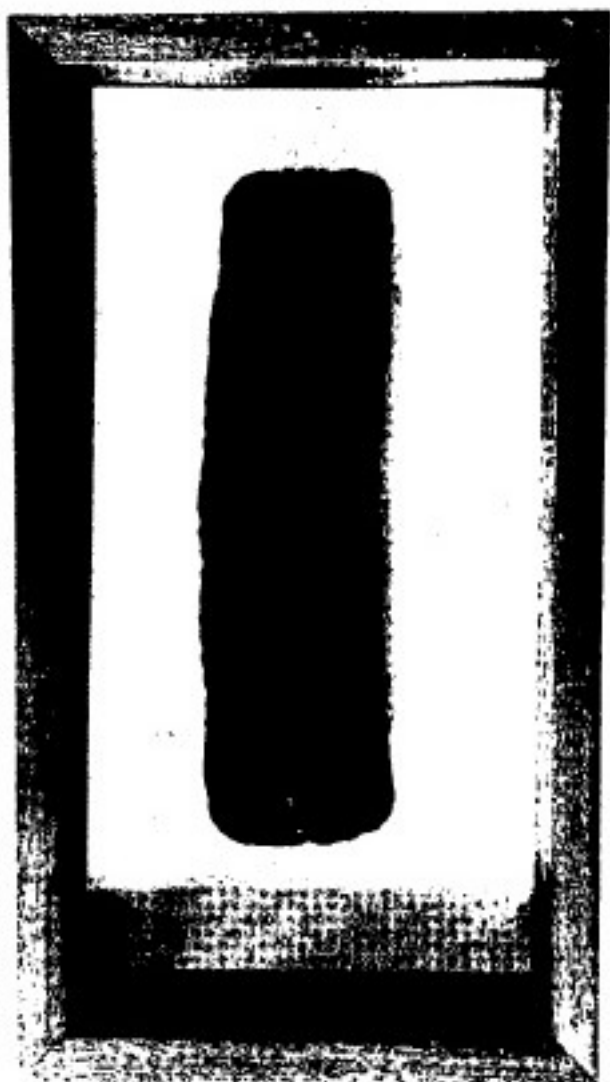


Photo courtesy of Iwan Allen & Co., Chicago

Tobacco was used as a medium of exchange on the North American continent as early as 1619 and through the 1700's. Fragments of the "money" have been found from time to time, but this photograph shows the only complete roll ever found. It was discovered in a trunk, among George Washington's personal possessions.



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Acknowledgment

THE information in this book was compiled over a period of more than two years. In my search for accurate material, I discovered that, while many books have been written about tobacco, its growth and history, very few of them contain the concise information that the average consumer or even tobacco man might wish to have readily at hand.

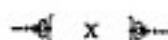
The many years that I have spent within the tobacco business have afforded me the opportunity to meet those individuals who are among the acknowledged leaders of the industry. Enlisting the help of these people through personal interviews and correspondence, in addition to many hours of research in various libraries, has enabled me to assemble the information in this book.

I wish to acknowledge, with the utmost appreciation, the help and encouragement that has been given me by the following persons and their companies, listed as follows alphabetically:

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Introduction

SINCE the day in 1613 when John Rolfe married Pocahontas, countless billions of pounds of tobacco have been sold and consumed by millions of people who haven't the slightest, or perhaps only the slightest, idea of what they are consuming.

Yet, whenever a new tobacco product—be it pipe tobacco, cigars or cigarettes—is produced, packaged and put on the market, the average consumer will invest his money to personally ascertain whether or not the claims of the manufacturer are true.

Another oddity about the industry is that there are less than ten major pipe tobacco and cigarette manufacturers and only six major cigar companies in the United States, in whose hands lie the secret formulae that make loyal customers out of 50 million Americans. Since our discussion centers on such highly individualistic areas as taste, aroma and habit, it is remarkable that so few tobacco companies completely satisfy the smoking needs of so many.

The butcher, the baker and the neighborhood electrician all

INTRODUCTION

have some knowledge of the merchandise they sell. But of the more than 1,000,000 retail shops in the United States that sell tobacco products, less than one percent of the merchants or their clerks have any idea what goes into the cigars, cigarettes and pipe tobacco they are selling. Sadly, most of them do not care.

The tobacconist, or retail specialist, on the other hand, is a dedicated man, who endeavors to acquire product knowledge, in order to better service his customers.

Together, you and I will open the doors of those factories in Richmond, Durham and Louisville, take a good look inside, and perhaps increase our smoking enjoyment by gaining some knowledge of the tobacco products we use.

We will also pay a visit to some of the tobacco counters around the world and see what the English, Dutch and Danes have to offer. We will spend some time in those areas where they grow exotic tobaccos, and in the course of our travels, we will see how pipes are made and how to buy and care for them.

On the way back to the United States, we'll stop and visit the cigar makers of the Canary Islands, Jamaica and Florida to see what happened to that "good five cent cigar."

Purpose

THE PURPOSE of this book is to set forth in simple, understandable terms how pipe tobacco, cigarettes, cigars and pipes are manufactured so that the consumer, the retailer and all others within the industry may increase their knowledge of the tobacco products they use.

We will try not to get bogged down by trying to explain highly sophisticated methods of manufacturing, or where certain little-used tobaccos come from, or terms and expressions that are meaningful only to the professionals who actually buy and manufacture tobacco products.

Thousands of private label brands of pipe tobacco, cigars and cigarettes are sold throughout the United States and each retailer gives his brand some exotic name to impress the consumer.

It is impossible to discuss all these brands. However, we should bear in mind that the basic manufacturing techniques are the same and it is the writer's purpose to standardize the usage of words and methods in the interest of clarity.

PURPOSE

Those engaged in the manufacturing of tobacco in its various forms spend a tremendous amount of time, talent, and money, marketing products that they believe will appeal to certain segments of the consuming public. It is not the writer's intention to fault these manufacturers or criticize the quality of their products.

However, in an effort to present this material in terms that are readily comprehended by the lay reader, over-simplification of certain complex processes may have resulted. Hopefully, the author's many friends among tobacco manufacturers will appreciate any such liberties.

TOBACCO

In this chapter, we are primarily interested in domestic leaf tobacco used in the manufacture of cigarettes and pipe tobaccos. Other countries throughout the world grow fine tobaccos, but the United States is the acknowledged world leader in the production of high grade leaf tobacco for these two purposes.

TOBACCOS GROWN IN THE UNITED STATES

The three important tobaccos grown in the United States for cigarettes and pipe tobacco are:

1. Burley
2. Virginia
3. Maryland

Burley Tobacco

Burley is grown in eight states and accounts for approximately 30% of all tobacco grown in this country.

Some of the finest Burley grades, used in making cigarettes and pipe tobacco, are grown in Kentucky, Tennessee and in southern Ohio.

The leaf of the Burley plant grows from twelve to as much as thirty inches in length. As with any other plant, soil and climate govern the type, grade and quality of leaf.

To increase the leaf development of Burley, the grower cuts off the flower buds as the plant matures, a procedure known as topping. This permits the plant to grow larger and it improves the quality of the remaining leaves. Burley plants range in height from five to nine feet, and after topping, the stalk has from 16 to 22 leaves.

Curing

The primary purpose of curing leaf tobacco is to accelerate the aging and drying processes under controlled conditions. With Burley tobacco, there are two types of curing employed: 1. Air Cured Burley and 2. Fire Cured Burley.

Air Cured Burley in turn is categorized as either—1. Light Air Cured, or 2. Dark Air Cured.

Air Curing: Approximately 90% of all the Burley tobacco grown in the United States is air cured, which simply means that after the tobacco is harvested, it is strung on long poles and hung in a barn to dry, primarily under natural weather conditions. This air curing process normally takes from four to six weeks and is completed when the central vein of the leaf is completely free of sap.

Fire Curing: In the Fire Curing of Burley, the tobacco is placed on poles, as before, and hung in a barn for a period of three to five days. Slow fires of hardwood and hardwood sawdust are maintained on the floor of the barn until the tobacco is completely dry. The process can take as long as forty days if the weather is excessively damp.

In addition to drying the tobacco, the Fire Curing process imparts an unusual smoky taste and aroma to the tobacco.

Most Fire Cured Burley comes from southern Kentucky and northern Tennessee.

Light Air Cured Burley: The larger, thinner middle leaves of the Burley tobacco plant are those most desired for the manufacture of fine pipe tobacco and excellent quality cigarettes. The top and bottom leaves are used in the manufacture of snuff, plugs, twist and inexpensive brands of pipe smoking tobacco.

The outstanding characteristics of Light Air Cured Burley are:

1. a leaf with a thin to medium body;
2. a color range from light yellow to reddish brown.

The top grades of Light Air Cured Burley, which are yellow, are referred to as "White Burley." This grade was accidentally grown in southern Ohio in 1864 from tobacco seed known as "little Burley." This top grade Burley has a fine texture, excellent burning qualities and the ability to absorb large amounts of casings and flavorings. Today, more than twenty countries over four continents grow "White Burley" tobacco.

Dark Air Cured Burley: The principal characteristics of this tobacco are:

1. a medium to heavy-bodied leaf;
2. a range in color from light to dark brown;
3. very mild taste with little or no aroma;
4. moderately cool smoking quality.

Dark Air Cured Burley is used mostly for chewing tobacco, plugs, snuff and inexpensive brands of pipe tobacco. Usually referred to as "Kentucky Burley," the lower grades, or heavier leaves are used in some tobacco mixtures to give the tobacco blend more "body."

Fire Cured Burley: Apart from its slightly smoky taste and aroma, Fire Cured Burley is moderately cool smoking, even though it is a much "heavier" type of tobacco. Its limited production is essentially for the same use as Dark Air Cured, that is in the manufacture of plugs, twists, snuff, etc.

How Burley Tobacco Is Used

Little or no sugar is found in the chemical composition of Burley tobacco, a condition enabling it to absorb great quantities of flavorings or casings. Since practically all cigarettes and pipe tobaccos manufactured in the United States are flavored, Burley lends itself readily to use in these products.

Also, because of the neutral taste and aroma of Burley, it blends quite easily with all types of tobaccos and assumes the taste and aroma of the tobacco or the flavorings with which it is blended.

Straight Burley tobaccos, flavored with casings, are easily obtainable at any tobacconist that sells bulk tobacco or in packaged form under various brand labels. There are many grades, types and tastes of Burley available.

Numerous pipe tobacco brands manufactured in the United States are referred to as mixtures, meaning that two or more types of tobacco are blended together to get a desired smoking effect. The majority of these domestic mixtures have a Burley base and in some brands the Burley content is as high as 80%. Different grades of Burley can be employed in a mixture to achieve certain results.

Virginia Tobacco

John Rolfe was the first man in the English colony of Jamestown to envision the commercial opportunities that tobacco offered. In 1612, he planted his first tobacco crop and in 1618, he shipped to England 20,000 pounds, making tobacco an important factor in the economy of the colony. It became the major product with which to barter goods from England.

The dark, coarse leaf that John Rolfe first found was difficult to smoke. It was eventually supplanted with leaf grown from seed imported from Spanish Trinidad. The so-called Bright leaf that became the favorite of European markets was not discovered until 1838 when one of the Slade brothers in Caswell County, North Carolina, or one of their slaves, accidentally discovered a new curing method that turned the leaf a bright yellow.

Today, Flue Cured Virginia tobacco represents 57% of the entire tobacco crop in the United States and is grown in the following "belts," comprised of six states:

Old Belt—Virginia and North Carolina

Middle Belt—North Carolina

Eastern Belt—North Carolina

Border Belt—South Carolina and North Carolina

Georgia Belt—Georgia, Florida and Alabama

Virginia tobacco is harvested by the "priming" method in which the leaves are hand-picked, two to four leaves at a time, when the tobacco is ripe. The process is repeated four to six times, until the stalk has been picked clean.

Flue Curing

Practically all Virginia type tobacco is Flue Cured. After the tobacco is harvested and strung in barn-like buildings, it is heated by wood, coal or oil, with a system of large pipes or flues carrying off the gases. Very special care is taken to assure that the tobacco is not affected by the smoke.

The Flue Curing process induces chemical change in the tobacco—aging and drying the leaf—under controlled temperature and humidity conditions.

Flue Curing takes from four to six days. The night preced-

American Leaf Tobacco

ing the day on which the tobacco is to be taken down, the barn door is left open and the floor sprinkled with water. This is done to let the leaves absorb just enough moisture so that they can be handled without breakage.

There are many grades of Virginia tobacco, and while the greatest amount of it is Flue Cured, smaller amounts of heavier, coarser grades are Fire Cured, to be used in the manufacture of snuff, twist and plugs.

Outstanding Characteristics of Virginia Tobacco

1. The leaf ranges in length from twelve to thirty inches and in this respect only is similar to Burley.
2. The color varies from light yellow to dark brown, after the curing process.
3. Virginia type leaf contains fewer natural oils than Burley.
4. The leaf is thin to medium in thickness, yet to be fuller bodied than Burley.
5. The chemical composition of Virginia tobacco includes a significant quantity of sugar and the leaf is regarded as quite sweet.
6. Because of its sugar content, Virginia leaf does not take to casing or flavoring as readily as does Burley.
7. Virginia tobacco has a mild flavor.

In common with all plants, Virginia tobacco's characteristics are determined by the soil and conditions of climate where it is grown. The finest grade is considered to be Virginia Bright and the top grades of Virginia Bright are determined by the position of the leaves on the stalk, and by the quality, color and body of the leaf. The large leaves at the center of the stalk are the finest.

Light colored Flue Cured Virginia tobacco is used primarily to manufacture high quality cigarettes and pipe tobacco. The darker, heavier grades of Flue Cured have a strong taste and are employed in the manufacture of snuff, twist, etc.

The tremendous growth of filter cigarettes in recent years has brought about increased use of the darker grades of Flue Cured tobacco in an effort to get more tobacco taste through the filter.

Although there are a number of varieties of Flue Cured tobacco, generally associated with the area of a state or region where they are grown, a consumer would find it difficult to differentiate one grade from another.

Matured Virginia Tobacco: This is a manufactured phrase, created for the purpose of implying that the Virginia tobacco used in a particular brand has been aged. The fact of the matter is that all Virginia type tobacco is usually aged in warehouses for two to three years before being processed for manufacturing.

Maryland Broadleaf Tobacco

Maryland Broadleaf tobacco grows only in the state for which it was named and is usually referred to as Eastern Burley.

The annual production of Maryland Broadleaf is only 38 million pounds a year, which represents less than 2% of the total poundage of domestic tobacco grown. Extensive use of Maryland tobacco, therefore, is curtailed.

The principal use of Maryland tobacco is in cigarettes since it blends well and has ideal burning qualities. Some Maryland tobacco is used in the manufacture of pipe tobacco and some

American Leaf Tobacco

is used as "filler" tobacco for cigars. It is interesting to note that a Swiss manufacturer has placed on the market a cigarette brand that is made exclusively from Maryland tobacco.

Curing: Maryland tobacco is harvested by the stalk-cutting method and is Light Air Cured in a manner similar to Burley.

Characteristics of Maryland Tobacco

1. Maryland tobacco has a large leaf, ranging in length from 12 to 30 inches. The width ranges from 6 to 15 inches.
2. Maryland tobacco leaves are thin.
3. The burning qualities of Maryland are the most ideal of all domestic tobaccos.
4. Maryland is quite neutral in taste and aroma.
5. It accepts casings or flavorings readily.
6. Maryland blends well with other tobaccos. This is the reason it is used chiefly as "filler" tobacco in the manufacture of pipe tobaccos and cigarettes.

Note to Pipe Smokers

If your pipe tobacco blend burns too slowly, the addition of a small amount of Maryland tobacco should correct the situation.

Also, if your pipe tobacco blend is a little "heavy," a small amount of Maryland, or even of Burley, thoroughly mixed, will tend to give your blend a milder character.

CHAPTER

II

Processed Tobaccos

PERIQUE TOBACCO

THE PROCESS of curing Perique tobacco is unique, its history dating back to the Choctaw and Chicasaw Indians, who lived in what is now known as St. James Parish outside of New Orleans.

Pierre Chenet, a Frenchman, discovered the Indians making tobacco, improved the process, and emerged with a tobacco named after his nickname, Perique.

Grown only in a small area near New Orleans, Perique is believed to be a Burley type of tobacco.

Curing

No other tobacco is cured in the same manner as Perique. After the plant is cut, each stalk is hung separately across the curing barn. In eight to fourteen days, when the leaves have wilted and yellowed somewhat, they are stripped from the

Processed Tobaccos

stalk, formed into small twists and packed in casks under great pressure until they turn black.

At three different intervals during the aging or curing period of approximately nine months, the tobacco is taken out of the cask, loosened, and then put back in the cask again, under pressure. It is cured in its own juice, fermenting under pressure until it is ready for the market place.

Outstanding Characteristics of Perique

1. It adds a spicy flavor to all tobacco blends.
2. It adds aroma to all blends.
3. Perique tobacco burns slowly.
4. It is without "bite," although it is far too heady to be smoked straight.

CAVENDISH TOBACCO

The word "Cavendish," when applied to pipe tobacco, seems to intrigue the American pipe smoker. It is also a confusing word, probably because Cavendish is a description of both a type of pipe tobacco and a manner in which tobacco is cut.

Cavendish pipe tobacco has been growing in popularity in recent years, to the extent that today, even a few American tobacco companies are manufacturing it.

There is no tobacco grown anywhere in the world that is known as a Cavendish tobacco. The basic process in the manufacture of a Cavendish tobacco is to impregnate the leaf with a great quantity of casing sauces. The taste factor, rather than the aroma, is the primary concern of the manufacturer, and each processor may use different types of equipment and different methods to achieve this end.

The tobaccos used in the manufacture of Cavendish may be Virginia, Burley or Maryland, or any combination of these three types.

In the process, the tobaccos are heavily cased with any or all of the following flavors: rum, maple, sugar, chocolate, licorice, honey, fruit and a few more that individual manufacturers may find on the chemists' shelves.

The creation of a Cavendish tobacco varies from country to country and from manufacturer to manufacturer. We will only discuss those areas from which the most widely known Cavendish tobaccos originate—The United States, The United Kingdom, The Netherlands and Denmark.

Cavendish Manufactured in the United States

In order to get the tobacco to accept the required amount of casings, it may be dipped (especially the Burleys) into a casing sauce or heavily sprayed with flavoring sauces. The tobacco is then allowed to bulk for a period of time, so that the tobacco and casings are wedded, after which it may be subjected to pressure. It can take weeks or months until the blend has properly accepted the casing materials. The color of the processed Cavendish ranges from a light brown to black, depending on the leaf and casings used.

Cavendish Manufactured in the United Kingdom

The English manufacture their Cavendish only with a heavier grade of Flue-Cured Virginia tobacco.

The tobacco is placed in molds and subjected to heavy pressure for three to four days. The pressure exerted on the

Processed Tobaccos

tobacco causes the natural oils to rise, and because of the heavy natural sugar content of the Virginia leaf, the tobacco develops a sweet taste. Most of the Cavendish produced in Great Britain is then cut and incorporated into a blend.

Cavendish Manufactured in The Netherlands and Denmark

The Dutch and the Danes employ a slow manufacturing method, first steaming the tobacco to open the pores and then casing it very heavily. The tobacco is then placed in molds and subjected to pressure until a cake is formed. The cake completes the process and can be cut into bars and again into smaller pieces.

Black Cavendish Tobacco

The unusual Black Cavendish is a processed tobacco that each manufacturer prepares in a different manner.

The two important steps employed, however, in all manufacturing of Black Cavendish are:

1. The dipping of the tobacco into various casing (flavoring sauces (usually licorice) and
2. The steaming of the tobacco, which turns it black.

Black Cavendish tobaccos can be manufactured from either Burley or Flue-Cured Virginia leaf. Usually, the heavier and darker leaf grades are used.

Since this tobacco is heavily impregnated with flavorings, the taste is naturally influenced by the type of flavorings used. Black Cavendish tobaccos usually have a slightly sweet taste

and can either be smoked straight or incorporated into a mixture.

Variations of the long cut are generally employed for better burning qualities.

Black Cavendish Manufactured in the United Kingdom

The Black Cavendish tobacco manufactured in the United Kingdom is made from the heavier and darker grades of Flue-Cured Virginia tobacco.

As we will point out, the use of additives is severely restricted in the United Kingdom, so that the usual method of processing this tobacco is to "sweat" and steam it, causing it to turn black.

The tobacco is then placed in a mold and subjected to pressure for one to several days. During this phase, additional steam may be applied. Eventually, a cake is formed, which is cut into bars and then sliced to the desired thickness.

The result is a very mild, slightly sweet tobacco that can be smoked straight or incorporated into a blend.

Cavendish Cut Tobacco

The term "Cavendish cut" simply means a type of cut that is between a long or ribbon cut and a heavy fine cut. These are discussed in the chapter on cuts of tobacco.

The type of cut of any tobacco is determined by the manufacturer on the basis of what he believes will give the best burning qualities to the tobacco. If he wishes to give a special name to the method by which he cuts his tobacco, I for one will not fault him.

LATAKIA

The internationally famous Latakia tobacco was named after the Syrian town of the same name, a coastal city lying opposite Cyprus on the Mediterranean Sea.

Today, Syrian Latakia enjoys a very small share of the world tobacco market, a situation that was brought about by a number of factors, including a lack of suitable woods and herbs with which to cure the tobacco.

During the great days of Turkish cigarette consumption in the United States (from 1900-1917), Latakia was used in many cigarette brands to "spice" the Turkish blends. With the rise in popularity of the domestic cigarette blends, from 1917 to the present, Latakia use declined, and is found principally in smoking tobaccos.

With the continuing growth (since 1964) of American and English pipe tobacco consumption (incorporating Latakia into various mixtures), Syria is now in the process of trying to revive her Latakia production. Most of the Latakia that is processed today comes from the island of Cyprus, near the eastern end of the Mediterranean. Latakia is also being produced in Greece, in a small way.

To set matters straight, there is no natural tobacco leaf that is grown that is known as Latakia.

Cyprus Latakia

Almost all of the tobacco used in the processing of Latakia tobacco comes from a Smyrna-type seed which grows into a tobacco plant that is known as "Yellow Cyprus." The color

of this leaf ranges from yellow to brown and grows to a maximum length of six to seven inches.

Curing Cyprus Latakia

The Yellow Cyprus leaves are harvested by de-stalking them and stringing them on long poles, to be hung in a tobacco shed. The leaves are smoked over open smoldering fires, made from mountain shrubs, small pine trees, myrtle or other fragrant woods. When pine is used, workers must be careful that too much tar does not accumulate on the leaf which would damage it. When the Yellow Cyprus has been fully smoked, it turns from its normally light color to a dark brown or black and it is then that it is known as Latakia.

The thin midrib is not removed. It has the same excellent smoking qualities as the leaf.

Syrian Latakia

There are three main varieties of Syrian Latakia, ranging from a grade that is black and strong in flavor to a grade that is light and aromatic and has the taste of a fine liqueur.

Syrian Latakia is derived from a tobacco leaf known as "shekk-el-bint." The leaves are ten to twelve inches in length and quite narrow. Each plant has from fifteen to twenty leaves, plus a number of flowers. At harvest time, the plant is cut and the leaves, plus the flowers, are laid on the ground to dry in the sun. When the drying process is complete, the leaves and flowers are taken to storehouses, where they are smoked for a period of 13 to 15 weeks. The smoke is derived from burning a combination of woods and herbs, which influence the eventual taste of the leaf.

Processed Tobaccos

When the smoking process has been completed, the tobacco is known as Latakia and is referred to by the Syrians as "Abourihm," which means king of flavor.

The Characteristics of Latakia Tobacco

1. Latakia is an Oriental tobacco, not a Turkish type.
2. Latakia is aromatic.
3. The texture of Latakia leaf, ranging from medium to heavy, is considered best for pipe tobacco blends.
4. The taste is smoky. The English refer to it as having a plum pudding taste.
5. Latakia is slow burning.
6. Latakia "spices" and accentuates the flavor of all tobaccos.
7. Syrian latakia is woodier than that from Cyprus because of its larger leaf and stem construction.

Care must be taken to avoid blending Latakia with any fruit-flavored aromatic tobaccos. The Latakia, being a natural aromatic, will reject the casing and still overwhelm the other tobaccos and flavorings.

Smokers adding five percent of Latakia to any tobacco blend will find that they have a sufficient amount to give the blend a distinctive Latakia taste. It is recommended that the pipe smoker experiment with blends containing from 1% to 3% Latakia before he ventures further.

However, there are a great many smokers who have accustomed their palate to Latakia and there are many private blends and a few commercial brands manufactured in the United States that contain 40% to 50% Latakia.

In the United Kingdom, many brands contain large percentages of Latakia in their blends but the taste is subdued by the addition of generous portions of Smyrna tobaccos.

CHAPTER

III

Oriental (Turkish) Tobaccos

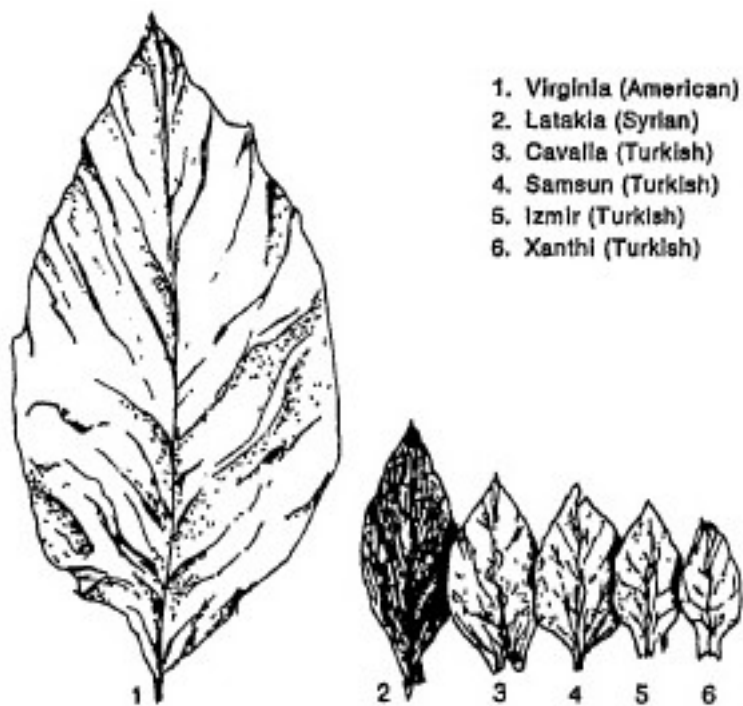
BOTH the tabacconist and the consumer feel that when they have unlocked the mysteries of Oriental tobaccos, they have reached a plateau that only a few experts walk upon. They are right. The subject is fascinating, the terms exotic and confusion is rampant. But after you read this chapter, you will be able to walk up to any expert, expound at length and say, "I know what I'm talking about."

Some of the confusion about Oriental tobaccos stems from the experts, for they refer to all Oriental tobaccos, with the exception of Latakia, as Turkish tobacco, though Turkey is only one of the countries of origin.

All Turkish tobacco is commonly classified as either aromatic or semi-aromatic tobacco, and most of the poundage that is sold throughout the world comes from the following countries:

1. Turkey
2. Greece

COMPARATIVE SIZES OF LEAF TOBACCO



3. Yugoslavia
4. Bulgaria
5. Russia

The major groups of aromatic Turkish tobaccos, as stated by Frederick A. Wolf, of Duke University, are:

1. Xanthi
2. Kavalla
3. Smyrna or Izmir
4. Samsun

Each group derives its name from the city or production center from which it comes, and within each group, there are numerous varieties.

The exact identities of each type of Turkish tobacco are further complicated by the fact that similar tobaccos can be obtained from geographically different regions; and yet in a single region, more than one type of tobacco may be grown.

It should be pointed out that because of the shifting population in the Macedonian areas due to wars and changes among the ruling factions, the peoples of Greece and Turkey immigrated to new areas and set up communities named after those they left. Therefore, there is much similarity in the names of cities and towns in both Greece and Turkey—names that also refer to the tobaccos they produce.

To avoid getting bogged down with technical differences between the many types and grades of Turkish tobacco, we will highlight only the principal Turkish tobaccos used in the United States and The United Kingdom.

Practically all Turkish tobacco has its origins in a single strain of tobacco seed, and depending upon geographical loca-

Oriental Tobaccos

tion, soils and weather conditions, the plant produces a relatively small leaf that is highly-prized throughout the world by cigarette and pipe smokers.

The outstanding characteristics of Turkish tobacco are:

1. Leaves vary in size from approximately 1½ inches in length and width to six inches in width and length.
2. Leaves have a fine, elastic and almost invisible vein system, that is generally free of wood tissue. This means that Turkish leaf tobacco will cut evenly and will not crumble.
3. Turkish tobacco varies in color from golden yellow to nut brown, depending upon the geographical area in which it is grown.
4. There is a very low nicotine content in Turkish tobacco. Dr. Frederick Wolf attributes this to the scarcity of rain and available nitrogen in the growing areas.
5. The "strength" of a tobacco is dependent on its nicotine content. Therefore Turkish tobacco is regarded as very mild, without harsh and irritating properties.

GREEK TOBACCOS

The important Greek tobaccos, used in the United States, are Basmas, Katerini (Samsun Seed) and Bashi Bagli.

Basma

Basma tobacco is considered by the experts to be the finest aromatic tobacco in the world. They refer to it as "the king of tobaccos." Grown exclusively in Greece, and principally in Western Greece, it accounts for approximately 35% of the country's tobacco crop. The word Basma comes from the Turkish word meaning "to compress."

The outstanding characteristics of Basma tobacco are the following:

1. Small leaves and fine vein system.
2. A variety in color from golden yellow to deep brown, depending on where it is grown.
3. Very elastic and velvety to the touch.
4. An exceptionally sweet and refreshing taste.
5. Excellent burning qualities.

Xanthi

Xanthi tobacco is a grade of Basma, coming from the area of Xanthi. It has the same outstanding qualities as Basma and the same variety of color. It also has a very strong but pleasant aroma.

Djebel

Djebel tobacco is another variety of Basma. It comes from the mountainous northern region of Xanthi. Although Djebel is similar to Xanthi tobaccos, it does have smaller and thinner leaves, and its color is lighter. Djebel tobacco has a milder aroma than Xanthi and even better burning qualities.

Mahalla (Mahala)

Mahalla is still another type of Basma tobacco that has thin, almost circular small leaves. These leaves have a very light, sweet taste, fine burning qualities and almost no aroma.

Mahalla tobacco is grown in an area near the city of Kavalla (Cavalla) and is considered to be excellent for high-grade pipe tobacco.

Dubek (Dubec)

Another variety of Basma tobacco, Dubek, originates in the Macedonian region of Greece. It has a light yellow leaf that is very aromatic and very sweet to smoke. Dubek tobacco is generally used to spice pipe tobacco blends.

Kavalla (Cavalla)

Kavalla tobacco has a larger, darker leaf than either the Xanthi or Izmir (Smyrna) type tobaccos, although it is similar to Xanthi. Depending upon the crop, it can be much more aromatic than the Xanthi types. It is considered a medium type of Basma by the experts.

Jenidze (Yeniji)

Jenidze tobacco is a Xanthi type tobacco that is reddish brown in color and has a more distinct, stronger taste, with little or no aroma.

Trebizond (Trebizon)

Trebizond tobacco is a Bashi Bagli type of tobacco, grown in central and western Greece. The term Bashi Bagli comes from the Turkish word meaning "tied head," which is the way the leaves are packed.

The leaves of Trebizond are medium to large and the color of the leaf is bright, reddish yellow. Trebizond tobacco has a strong, sweet taste but little or no aroma and is considered a fine "filler" type tobacco. It also has a higher nicotine content than other varieties of Greek tobacco.

Katerini (Samsun)

Named after the Samsun district of Turkey on the Black Sea, Samsun tobacco has a small, heart-shaped leaf that is golden in color. The tobacco has a very pleasant taste and a delicate aroma. It also has excellent burning qualities and is considered by some experts to be equal in quality to the Basma-type tobaccos.

TOBACCOS GROWN IN TURKEY

The three principal tobacco growing areas of Turkey are:

1. The Aegean zone—Izmir
2. The Black Sea zone—Samsun Baffra
3. Marmara and Thrace—Brussa

It should be remembered that within each type there are several grades and also that the tobaccos that bear the same names as their Greek cousins are quite similar and have the same basic aroma, nicotine content and burning and other qualities.

Leaves are hand picked, and the top leaves of the plant, which are the last to mature, are considered the best, while the middle and bottom leaves are said to be inferior.

Smyrna (Izmir)

Izmir tobacco constitutes approximately 60-70% of the entire Turkish tobacco crop. It has a very small leaf with a small vein construction and a low nicotine content. The color varies from light green to pale gold and it is very

Oriental Tobaccos

sweet and lightly aromatic. It is excellent for blending because it "marries" with practically any other type of tobacco. It is the most widely used Turkish tobacco in American blend cigarettes.

Samsun-Maden

(Samsun tobacco grown in the Black Sea area)

Real Samsun, which cannot be successfully grown in any other part of the world, is considered by the Turks to be among the world's finest tobaccos. It has a small leaf, is light in color and has an extremely fine texture. It is generally used in pipe tobacco and in cigarettes of superior quality.

Baffra

Basically the same type tobacco as Samsun, Baffra tobacco has small, red or darker brown leaves of fine texture and it gives off a very pungent odor. It is not quite as fine a tobacco as Samsun and is used chiefly to give flavor and aroma to all blends.

Trebizond

Trebizond tobacco has large, light red leaves of fine texture. Its taste is strong and it is very aromatic. The leaves are usually "topped" in the growing, which adds to their size and to their nicotine content. Most Trebizond is grown for local (Turkish) consumption.

TOBACCOS GROWN IN YUGOSLAVIA

Yugoslavia produces many varieties of Oriental tobacco, the most outstanding of which are Prilep, Yakka and Djebel. All

ALL ABOUT TOBACCO

three are Basma types and the most popular and widely-produced is the Prilep variety, which is especially adaptable to American filter cigarettes. The Yakka tobaccos are more delicate and are very similar to Greek Basmás. The Djebels are grown in rather restricted quantities and are very similar to the Bulgarian Djebels.

TOBACCOS GROWN IN RUSSIA

In areas surrounding the Black Sea, Russia produces Sukhum tobacco, a strain from the Samsun Seed. Grown in and around Sukhumi, some experts consider it the finest Oriental grown anywhere.

TOBACCOS GROWN IN BULGARIA

Bulgaria produces in its Macedonian area Oriental tobaccos that are similar to the Basma and Bashi Bagli types of Greece. As in the case of Russian tobaccos, Bulgarian leaf is not a principal import to the United States.

●

C H A P T E R

IV

How Tobacco Is Flavored (Cased)

THE CASING, or flavoring, of tobacco, together with the tobacco blend, constitutes the secret recipe in each package of cigarettes or pipe tobacco. The public's acceptance or rejection of a new brand will be determined by this combination, and, needless to say, the art of casing requires great skill.

The tobacco leaf is the chief source of flavor and aroma in any tobacco product, but because tobacco crops vary from year to year, flavoring supplements are necessary to help maintain a consistency in both taste and aroma.

Additives to tobacco products can be classified as follows:

1. *Flavorings*—the individual synthetic or natural flavors that are added to tobacco to give it a particular taste.
2. *Casings*—a combination of flavorings plus hygroscopic agents and fixatives, to keep the casing stable.
3. *Top Dressings*—additives that are usually one of the last steps in the manufacturing of tobacco products. Their primary purpose is to assist the aroma, although they also have a flavoring impact upon tobacco.

Flavorings

Concentrated flavorings, as opposed to natural flavorings, are preferred by most tobacco manufacturers because the extract, or concentrate, can be manufactured much more uniformly and is less subject to changes while being stored. Following are some of the easily recognized flavorings:

Chocolate—Chocolate is manufactured as a natural product from the coco bean. However, it may be fortified with some cocoa which is synthetically produced.

Vanilla—Vanilla can be manufactured synthetically or it can be used in its natural form.

Menthol—Menthol can also be made synthetically or it can be used in its natural state, that is distilled from peppermint oil.

Rum—Rum used in tobacco can be either Jamaican or the New England type. It can also be synthesized.

Fruit—Fruit flavors are obtainable in both natural and synthetic form. Natural fruit flavors are extracted from processed fruit.

Wine—Wine flavors are as varied as the types of wine available: burgundy, sherry, madeira, etc.

Licorice—Licorice comes from the licorice root and can be fortified with synthetic chemicals.

Most of these flavorings are so highly concentrated that some blends use as little as four fluid ounces per one hundred pounds of tobacco. The amateur blender is cautioned to be extremely careful in the application of flavoring.

How Tobacco Is Flavored (Cased)

Composition of Casing Sauces

All casing sauces contain a "fixing agent," or a resin type chemical to assure that the flavorings will adhere to the leaf and remain stable until used. In addition to "fixing agents" casing sauces contain flavorings, water and a hygroscopic agent (or humectants).

Hygroscopic agents are chemicals used to control the moisture content of tobacco. They prevent the tobacco from becoming too dry in a dry climate or from "picking up" moisture in a humid area. The three most widely used agents are Sorbitol, Glycol and Glycerine.

To further illustrate how a casing sauce is used, some manufacturers dip their tobacco, while others spray it before placing it into the blend. The casing sauce may contain all or part of the following ingredients:

Licorice
Chocolate
Fruit flavors
Gums
Glycerine
Water

After the application of a casing sauce, the tobacco is dried, bulked and then blended with other tobaccos.

In pipe tobaccos, up to 35% of the blend may be in the form of casing. In the manufacture of cigarettes, approximately 10% to 12% of the finished blend is in the form of casing. In both cases, care must be taken to assure that the casing will "wed" with the tobacco in the blend.

Top Dressings

As we have noted, top dressings are applied to the tobacco blend to give it a special aroma. Typical top dressing ingredients are:

Deertongue—the powdered leaves of the wild vanilla plant, or its extract.

Tonka—a derivative of the bean from a South American tree.

Cocoa—from the cocoa bean.

VARIOUS TYPES OF TOBACCO CUTS



Curly



Granulated



Long Cut



Cube Cut



Fine Cut



Sliced Plug (American)
Flake Cut (United Kingdom)

C H A P T E R

V

How Tobacco Is Cut

THE CUT OF TOBACCO is determined by the product to be manufactured: smoking tobacco, cigarettes, cigars or snuff.

The ultimate objective of any tobacco manufacturer (or home blender) is to obtain a well-mixed tobacco with a consistent uniformity in taste and a "rate of burn" that is not too fast (in which case it would probably burn hot) or too slow (which will obligate the smoker to use a number of matches).

The burning qualities of any blend are determined by the following factors:

1. *The type of tobacco used.* Thin leaved tobacco will burn more readily than tobacco with heavier leaves.

2. *The moisture content of the tobacco.* The degree of dryness, of course, affects the speed with which it burns.

3. *The type of cut or cuts used.* As a general rule, the amount of air circulating around the shredded leaf governs

How Tobacco Is Cut

the rate of combustion. The denser the tobacco, such as plug-cut tobacco, the slower it will burn.

4. *The amount of casing or flavoring used.* The less casing applied to tobacco, the longer it will burn. Brands made in the United Kingdom, which contain infinitesimal amounts of casing by law, are examples of such blends.

Types of Cuts

Among the major pipe tobacco manufacturers in the United States, four basic cuts are generally used, either singly or in combination. In the manufacture of cigarettes, a fine cut tobacco is used for obvious reasons. Heavier or rougher cuts would tear the delicate cigarette paper.

Before we discuss the various cuts of smoking tobacco, the reader should know that tobacco is cut with either one or the other of two types of equipment.

In one machine, with a funnel-shaped slide, leaf is compressed by heavy rollers into "plugs" or "cakes." These are then chopped, at prescribed intervals, by a guillotine-like cutter. After the initial slice is made, the tobacco is again fed to the cutting knives at a right angle to the original cut. The second cut determines the size and shape of the tobacco particles.

In the other type of machine, the tobacco is fed much the same way, but a set of high-speed rotary blades cuts the tobacco at designated intervals. The rotary blade method is generally used by large volume cigarette and pipe tobacco manufacturers.

The four basic cuts of tobacco are (1) granulated, (2) cube, (3) shag or long cut, and (4) plug or flake cut (the English refer to a sliced plug cut tobacco as a flake).

Granulated Tobacco

Granulated tobacco is cut from stemmed leaf in irregularly shaped, medium size ($\frac{1}{16}$ inch or smaller) flakes. Since this cut of tobacco packs quite well with air spaces between particles, it burns slowly and coolly.

Cube Cut Tobacco

Tobacco cut in the shape of a cube (about $\frac{1}{8}$ inch on each side or smaller) generally has the same burning qualities as a granulated cut.

Shag or Long Cut Tobacco

Shag or long cut tobacco is cut from stemmed leaf and may range from a ninetieth of an inch to a sixteenth in width and in length from a half inch to an inch. Shag or long cut burns much faster than either granulated or cube because more air can circulate throughout the strands of tobacco.

Plug Cut Tobacco

In plug cut, a solid cake of tobacco is first formed and then sliced. There can be any number of slices to an inch, generally varying from 15 to 25. Because of the density of the plug or flake cut, very little air circulates through the tobacco, and it burns very slowly.

The following are variations of or other names for the cuts mentioned above:

How Tobacco Is Cut

1. *Rough cut.* This is a heavier version of the granulated cut.

2. *Crimp cut.* This is a slightly smaller cut than the regular granulated.

3. *Fine cut.* Usually used for cigarette tobacco, this is a variation of a long cut. Fine cut tobacco is cut between 30 and 40 times to the inch when it is to be used in pipe tobacco and from 50 to 90 times to the inch when it is to be used in cigarettes.

4. *Ribbon cut.* This is another wider variation of the long cut.

5. *Cavendish cut.* Cavendish is also a long cut, between a fine cut and a ribbon cut, depending on the manufacturer.

6. *Crushed plug.* This tobacco is cut at right angles to the plug and may be classified as a coarser and larger granulated tobacco cut (about $\frac{3}{16}$ of an inch cubed).

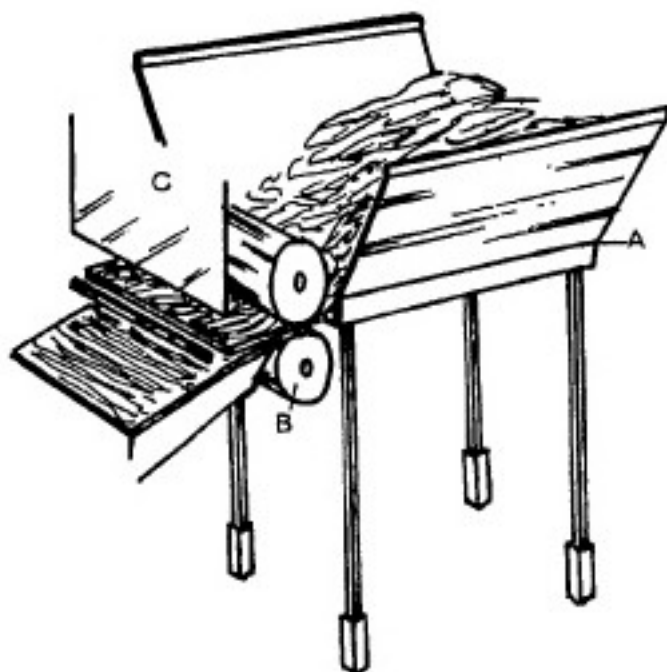
7. *Slice cut.* This is a slice of tobacco taken off a plug.

8. *Ready rubbed.* Usually, all plug or flake cut tobacco is rubbed or broken up in the hands before it is put into the pipe. A plug tobacco that is broken up in this fashion before being packaged is referred to as a ready rubbed.

9. *Flake Cut (American)* is a slightly larger version of a cube cut tobacco that has irregular shapes ranging in size from $\frac{1}{8}$ " to $\frac{1}{4}$ " and has been cut from unpressed leaf tobacco.

As a rule of thumb, larger and longer cuts are an indication that the blend is composed entirely of leaf tobacco and is without stems.

TOBACCO CUTTING MACHINE



The tobacco leaf is placed on a conveyor belt (A) and then compressed between heavy rollers (B). A single guillotine knife blade (C) slices the tobacco to desired width.

CHAPTER

VI

How Tobacco Is Manufactured

PRACTICALLY ALL major pipe tobacco and cigarette manufacturers use the same type of equipment to make their products. Here and there certain tobacco manufacturers may use an unusual piece of equipment or a small manufacturer may use a machine that he feels fits his needs. However, for the purposes of this book, we will deal only with the types of equipment and methods that are in general use.

The major differences among manufacturing processes are in the tobacco that is used, the casings employed and the final blend that goes into the marketed product.

In order to give a clear, concise picture of how tobacco is manufactured, we will discuss each stage separately so that the reader can easily follow the continuity.

Stage I. After the tobacco is harvested and cured (as discussed in Chapter I) the tobacco is then tied in "hands." A "hand" of tobacco is usually twenty or more leaves tied

neatly with a "tieleaf" wound around the stems of the leaves. However, all Bright or Virginia tobacco is now sold in loose leaf form as well.

Stage II. The tobacco is taken by the farmer to an auction and sold. The tobacco buyer then sends the tobacco to a "redrying plant" where it is conveyed through a steam-heated chamber. This takes practically all the moisture from the leaf. It then passes through a cooling section and on to an "ordering" area where a controlled amount of moisture is replaced.

Virginia, Burley and Maryland tobacco is "stemmed" before being redried, which means that the tough veins and stems of the leaf are removed by special machines.

Stage III. The tobacco is then placed in hogsheads, weighing up to 1,000 pounds each, and allowed to age for a period of two to four years in specially designed warehouses. Tobacco is aged because, like any other plant, it undergoes natural fermentation. In the case of tobacco, a chemical change takes place, giving it a milder, sweeter flavor.

Stage IV. After the aging period, the hogshead is removed from the storage warehouse to the manufacturing plant. Here it is placed on small "wheelers" and rolled to the desired position where the sides and the top of the hogshead are stripped off.

Stage V. At this point the tobacco is dry and brittle and very difficult to handle. To remedy this condition, the hogshead of tobacco is placed in a large vacuum chamber. Immediately after the air has been extracted from the tobacco, live steam is injected which penetrates to the core of the tobacco and softens it to a point at which it can be handled easily.

How Tobacco Is Manufactured

Stage VI. The various types and grades of tobacco that have been made pliable through the use of steam are now weighed, each in the exact amount that is called for in a blend to be manufactured. (For example, in the manufacture of cigarettes, different amounts of various grades of Virginia, Burley and Turkish might be measured.) The tobacco is then placed alongside a conveyor belt.

Stage VII. One of the primary objectives in manufacturing a fine tobacco product is to make certain that your product will have a consistency of taste and a uniformity of "burn." Therefore, the blend must be thoroughly mixed. With this in mind, the tobacco is hand fed to the conveyor belt which in turn feeds it into a very large rotating cylinder (mixing drum) which gently tumbles the leaf and thoroughly mixes all the ingredients.

This large cylinder is fitted with pipes and nozzles inside, through which the tobacco is sprayed with casings (flavorings) as it tumbles about.

Stage VIII. After the tobacco is completely mixed, it is placed, still in its leaf form, in wooden "wheelers" which resemble commercial laundry carts. A rubber composition mat is placed over the tobacco and it is allowed to "bulk" for 24 to 48 hours.

The process of "bulking" is important because during this stage of manufacture the tobaccos become completely "wedded," meaning that all the tobacco in the "wheeler" will take on the characteristics of the different grades and types of tobacco that are in the "bulk." ✓

The purpose of "bulking" tobacco is to give further in-

surance that the mixed blend, when it is smoked, will have a uniformity of taste, aroma and burning quality.

Stage IX. After the tobacco has been "bulked," it is ready to be cut. If we have made a cigarette blend, a fine cut will be employed. If a pipe tobacco blend has been processed, any of several cuts may be used.

It should be noted that while the complete manufacturing process is taking place, exact moisture control within the factory is maintained. The plants of all leading tobacco manufacturers are completely humidified, for if the tobacco lacked moisture, the product would appear on the market in a very dry state. Conversely, if there was an excess of moisture, the tobacco would have a tendency to "mold."

CHAPTER

VII

Blending—Pipe Tobacco

THE MOST fascinating aspect of the entire tobacco industry is the blending of the tobacco. If we consider that only one type of tobacco may have as many as 170 different grades it becomes obvious that it takes many years for an individual to become a professional leaf buyer who completely understands the burning and taste qualities of each tobacco grade. It is also true that the professional tobacco blender must completely understand how each grade and type of leaf will burn and taste and how it will react when placed in combination with other grades and types of leaf.

The pipe smoker will discover a most interesting hobby if he decides to "blend his own" since the various combinations that can be created are numerous and each blend will impart a different taste.

Most pipe smokers are a very strange breed unto themselves for they are continually seeking a pipe tobacco mixture that is unknown to any other man on earth. Each pipe smoker is convinced that his taste buds are so delicate that ordinary

packaged brands will not satisfy him. Oh yes, he may buy packaged brands and then add or subtract a little here and there and come up with a formula that he will give to his friends only in complete secrecy.

To help with his experimentation he relies on his retail tobacconist and feels most fortunate when he has a tobacconist who carries a large variety of bulk tobacco and who in many cases will spend a great deal of time in an effort to get him a suitable mixture.

Individual taste is very difficult to interpret and the pipe smoker should be cognizant of the fact that while he may try two identical blends of tobaccos, if the casing sauce varies he will put his mark of approval on one blend and "thumbs down" on another.

Keeping in mind that there are 14 domestic types of leaf that may be used in pipe tobacco, representing hundreds of grades, plus Oriental tobaccos, it is most important to get a uniformity of product on a continuing basis.

For the novice who has just purchased his first pipe and who is determined to enjoy the art of pipe smoking it is important that he first become acquainted with a very mild type of pipe tobacco. Along these lines it is recommended that he first try a mild Burley based mixture, or a Dutch or Danish sweet tobacco that he can readily purchase in packaged form. It is sad to relate that new pipe smokers have been sold tobacco that they found disagreeable and these men were lost to the pipe smoking community forever.

After the novice has received his baptism for a few months in the art of enjoying his pipe and tobacco we now can proceed to open our jars of tobacco and explain the numerous combinations and taste variations that are his for the asking.

The writer would like to be of help to his fellow pipe

Blending—Pipe Tobacco

smokers and his many friends among the retailers. With this thought in mind, here again is a brief resumé of the general characteristics of the tobaccos we are going to use, and the cut of tobacco that should be employed.

The following blends are designed to be only "basic" mixtures of various types and grades of tobacco that can be added or subtracted from the blend to please the taste of the smoker.

Tobaccos: Resumé:

1. Burley has a neutral taste.
 - a. Good grades of Burley have a golden, copper color.
2. Virginia (Flue Cured) is sweet but will burn quite hot when smoked straight.
 - a. Good grades of Virginia have a high yellow color.
3. Maryland tobacco has a neutral taste and excellent burning qualities.
4. Turkish tobaccos are generally sweet and aromatic.
5. Latakia has a smoky, plum pudding smell and will smoke a little "heavy." It will overwhelm a blend unless only small amounts are used.
6. Perique adds good flavor and aroma to any tobacco.
7. Cavendish tobacco will add sweetness and aroma to any blend. A Straight Virginia Cavendish will burn moderately hot.

Smoking Qualities of Tobacco When Used in Combination with Other Types

1. Burley tobacco will blend very well with all types of tobaccos and can play either a major or minor role when blended, depending upon the taste desired.

2. *Virginia (Flue Cured)*—In the event that an American type of blend is desired Virginia tobacco should play a minor role; or conversely if an English type of blend is desired Virginia tobacco should be the major ingredient.
3. *Maryland tobacco*—Maryland blends well with all types of tobaccos.
4. *Turkish Tobacco*—Used primarily in English type blends though it can readily be used in American type mixtures. It is considered a natural aromatic tobacco. If your blend is too rough or harsh in its smoking qualities, Turkish will sweeten it. The Smyrna type leaf is especially desirable in adding color and taste to your blend.
5. *Latakia*—Latakia blends readily with all tobaccos but in the event that too much is added to a blend a heavy smoky taste will predominate. Latakia can be smoothed out by the addition of Smyrna type tobacco. However, when Latakia is used in combination with artificially flavored aromatic tobaccos, it tends to overpower the mixture.
6. *Perique*—Perique can add spice to your blend when added in relatively small quantities. If your blend proves to be too "heady" add some Burley or Maryland to subdue the taste.
7. *Cavendish* types of tobacco are usually very mild and sweet and can be fortified to reduce the sweet taste by the addition of Burley or Maryland types of tobacco.

Mixing the Blend

Mix all blended tobaccos very well.

Try to keep the tobacco you use fairly uniform in cut. In

Blending—Pipe Tobacco

other words use a cube cut with a granulated cut, a long cut with a ribbon cut.

The reason for this is that if you mix a 50% cube cut with a 50% long cut there will be a tendency for the tobacco to separate, the smaller cube cut going to the bottom of the container in which you hold your tobacco.

When you add only a 5% amount of a long or fine cut tobacco to a 95% blend of cube cut the mixture will hold together quite well.

American Type Tobacco Blends

1. 100% Burley—Cube cut or granular white Burley would be the best grade and excellent smoking. The taste would be influenced by the casing used. Slightly darker, heavier Burleys also would prove to be excellent for pipe tobaccos.
2. 50% Burley (Granular or Cube Cut)
50% Virginia (Granular or Cube Cut)

White Burley plus Virginia Bright cut in a cube or granular form may please some smokers and could be purchased in the heaviest darker grades of Burley or Virginia which would give more body to the blend.

3. 75% Burley (Granular or Cube Cut)
25% Virginia (Granular or Cube Cut)

This type of blend would prove to be milder smoking than blend #2 as the sweetness of the Virginia would be tempered by the Burley.

4. 72% Burley (Granular or Cube Cut)
25% Virginia (Granular or Cube Cut)
3% Perique (Granular or Cube Cut)

This blend would be spiced by the Perique and would give the smoker a most interesting taste. Add 5% Perique to this blend and the Perique would become the dominant taste.

5. 72% Burley
25% Virginia
3% Latakia

Like Blend #4 there would be a pronounced difference with the addition of the Latakia and a 3% addition would make a noticeable difference. To increase the plum pudding taste effect, 5-10% of Latakia can be added.

6. 70% Burley
25% Virginia
3% Perique
2% Latakia

This type of blend also would make interesting smoking and when mixed very well the smoker will be able to notice the subtle qualities of both the Perique and Latakia.

7. 70% Burley
20% Virginia
10% Turkish

In this type of blend the sweet pungent taste and odor of the Turkish will be apparent even though this blend will smoke

Blending—Pipe Tobacco

very smoothly. The smoker can adjust his blend by reducing the amount of Turkish used and increasing the percentage of Burley in the blend.

8. 85% Burley

15% Cavendish (Granular or Cube Cut)

The sweetness of the Cavendish tobacco will be most pronounced; however, a cool, pleasant smoke will be the end result.

9. 73% Burley (Cube or Granulated Cut)

25% Virginia (Cube or Granulated Cut)

2% Irish Aromatic (Cube or Fine Cut)

Very few tobaccos are manufactured in the United Kingdom (Northern Ireland) that are full aromatic brands. They are manufactured in a bonded factory and shipped all over the world. A small quantity of these tobaccos added to any Burley-based blend will give that tobacco a delightfully fragrant aroma and an exceptionally smooth taste.

English Blends

The American pipe smoker may find it quite difficult to blend an English type mixture. As we will discuss, English law prohibits the use of artificial flavorings and hygroscopic agents in the manufacture of tobacco products. Practically all processed American tobaccos do contain a hygroscopic agent, plus some casing sauce, however light it may be, and this will be the closest that a pipe smoker in the United States will come to a "pure" tobacco.

If the bulk tobacco that you purchase at your retail tobacco shop is lightly cased and does not contain aromatic additives the pipe smoker or his tobacconist will be able to put together an English type mixture that may prove to be very good.

Typical English Blends

1. 80% Virginia (Long or ribbon cut)
15% Turkish (Long or ribbon cut)
5% Latakia (Granular, Cube Cut or Long cut)

By using the fine grades of Virginia Bright tobacco as a base and Turkish tobacco as a supplement to soften the taste of both the Virginia and Latakia we can arrive at a typical English mixture.

The Turkish tobacco used can be a combination of Kavalla, Samsun, Izmir, Xanthi or Dubeck and if we wish to give added color and sweetness to the blend a generous helping of Smyrna will accomplish this.

The 5% addition of Latakia will give the mixture the typical English "plum pudding" taste and the amount of Latakia used can be increased or decreased to give the smoker the taste he desires.

2. 80% Virginia
15% Turkish
5% Perique

The exact same principal of blending as used in Blend #1 can be used in this blend. However, the Perique used will play an important role in bringing to the smoker the "fig juice"

Blending—Pipe Tobacco

taste of the Perique. The quantity of Perique used also can be varied to give the consumer the taste he desires.

3. 100% straight Virginia (Usually cut as a thinner version of the ribbon or long cut)

A straight Virginia tobacco usually manufactured from Virginia Bright tobaccos will smoke somewhat hot and sweet, and is not recommended for the novice smoker. In the event that the smoker finds this type of tobacco has a tendency to "burn" his tongue he can add up to 15% Turkish tobaccos and arrive at a mixture that will smoke cooler and a bit sweeter.

CHAPTER

VIII

How Pipe Tobacco Is Manufactured and Packaged in the United States

PRACTICALLY ALL packaged brands of pipe tobacco manufactured in the United States use Burley tobacco as a base. And because the mechanical equipment used by all manufacturers is basically the same, differences between one tobacco product and another are determined by types and grades of tobacco used, the casings employed, the manner in which the tobacco is cut and most importantly, the degree of individual skill used in blending.

Blending the Unprocessed Leaf

Since tobacco crops vary from year to year, it is mandatory that tobacco manufacturers use leaf that is at least one to three years old, in an effort to maintain consistency and uniformity in the blend through each succeeding year.

Tobacco crops of any type or grade may vary from one year to the next in the strength of the taste, the thickness of

How Pipe Tobacco Is Manufactured and Packaged

the leaf, the aroma and the burning quality. To insure against any deviation of formula, many tobacco manufacturers purchase leaf tobacco in "blended strip" form. This means that combinations are sold which tone down elements of the leaf that are over-developed or increase those that are under-developed. A "blended strip" of any type may contain four or five grades of tobacco which compliment each other. If for any reason a particular grade is not available in a given year, another grade may be substituted, and the overall qualities of the blend are not impaired.

Of the 68,000,000 pounds of pipe tobacco manufactured in the United States each year, over 90% of this tonnage is packaged in one of two ways:

1. Straight Burley Blend
2. Mixture

Straight Burley Blends

Straight Burley blends are selections from numerous grades of Burley that both compliment and compensate one another as to taste, aroma and burning qualities.

Because Burley leaf accepts casing sauces readily, such sauces are used in practically all straight Burley blends manufactured. The determination of which sauces to use is made on the basis of the taste and aroma desired and on how well the sauce weds with the grades of tobacco used, to give the overall blend a balance.

Mixtures

Mixtures manufactured in the United States usually contain a combination of two or more of the following tobaccos:

1. Burley
2. Virginia
3. Maryland
4. Perique
5. Latakia

Although Burley is generally used as a base for all mixtures, there are brands made and sold in the United States that are composed of 50% Burley and 50% Virginia. The use of Perique or Latakia in a mixture does not usually exceed 5% because of the very definite characteristics of these types of tobacco.

Cuts of Tobacco Employed by American Manufacturers

Most popular brands on the market today are cut in either a cube or granulated form, or in a combination of these two cuts, depending on the tobaccos used. These two cuts hold together well and give the tobacco excellent burning qualities.

Long or ribbon cut tobacco is very rarely used by American tobacco manufacturers.

Plug cut tobaccos are most frequently used in the United States in the form of plugs or cakes, enjoyed by those who wish to chew tobacco. These cakes are generally of Fire Cured Burley tobacco that has been tightly compressed into squares, measuring about two inches across and $\frac{1}{4}$ inch in thickness.

Sliced tobaccos are manufactured and sold in the United States, but they account for a rather small percentage of the overall tobacco manufactured.

The moisture content of tobaccos made in the United States is about 14%-16%. When the tobacco is placed in a foil

How Pipe Tobacco Is Manufactured and Packaged

package, which in turn is inserted in a cardboard outer container, it has a shelf life of nine months to a year before it becomes dry. Tobacco packed in roll type poly bags has a shelf life of from three to six months, depending on the degree of humidification under which it is kept. When purchasing tobacco in this type of packaging, the smoker is advised to check it for freshness. This can be done by feeling it. If the package feels soft, the tobacco is fresh; if the package feels dry and crackles when pressed with the fingers, it is generally dry.

Aromatic Tobaccos

The growth of aromatic tobacco sold in this country has been remarkable. During the past decade, the trend among pipe smokers, particularly the younger smokers, has been toward sweet tasting, sweet smelling tobacco, and manufacturers aware of this have made strong efforts to fulfill this need.

The aromatics most commonly used are:

1. Cherry
2. Chocolate
3. Maple
4. Lime
5. Mint

Since tobacco has a tendency to absorb any odors that are placed in close proximity, the manufacture of an aromatic tobacco must be done in an area that is completely divorced from any other part of the tobacco factory.

Most manufacturers spray aromatics on the tobacco after

the blend has been manufactured, rather than in the casing process. Because all aromatics are highly volatile, it has been the practice of manufacturers to spray the tobacco blend with the aromatic and then to mix the blend again thoroughly and rebulk it.

Aromatic tobaccos are packaged rapidly so that the aroma is not diluted before the package is sealed.

Tip to Pipe Smokers

As a general rule, the packaged blends of Burleys and mixtures that are light brown or golden in color will smoke milder, and the leaf used probably is a better grade than the heavier tobaccos that have a dark brown or almost black appearance.

However, many people find these dark tobaccos tastier than the light, mild varieties. It is a matter of personal preference.

CHAPTER

IX

Pipe Tobaccos Manufactured in the United Kingdom

ENGLISH pipe tobacco manufacturers, by virtue of restrictions placed on them by the government in the matter of casings and flavorings, must of necessity use the finest grades of leaf tobacco procurable.

English law, as interpreted by the Commissioner of Customs and Excise, reads:

1. The use of flavorings in the manufacture of tobacco is restricted except as otherwise permitted by the Commissioner of Customs and Excise.
2. Only one approved flavoring may be added to any tobacco, and the total amount of the flavoring used must not exceed that laid down in the letter of approval.
3. All approved flavorings must, before use, be completely dissolved in spirits (such as isopropyl alcohol).
4. Before use, each flavoring (including natural essential

oils in solution) must, in the condition in which it is added to the tobacco during the course of manufacture, be specifically approved by the Commissioner.

Since isopropyl alcohol or any other approved solvent is volatile, we can assume that rapid evaporation takes place and that therefore only a minimal amount of the flavoring material used would remain on the tobacco. It is estimated that less than half of one percent of the weight of any given brand manufactured in the United Kingdom is composed of flavorings, as contrasted with some brands manufactured in the United States in which casing sauces constitute as much as 25% of the gross weight of the tobacco product, or in the case of Dutch tobaccos, as high as 35%.

In view of the preceding paragraph, it is apparent that in order for a manufacturer in the United Kingdom to put a brand on the market, he must not only use the finest tobaccos available but also must have a great deal of skill in blending, to give the consumer a product having an excellent taste, pleasant aroma and good burning qualities.

The basic tobaccos used by English manufacturers are:

1. Virginia
2. Turkish
3. Latakia
4. Perique
5. Burley (in very small quantities)

Most English mixtures employ Virginia tobacco as a base, flavoring this with Turkish aromatic tobaccos. The Turkish tobaccos generally used are:

Pipe Tobaccos Manufactured in the United Kingdom

1. Smyrna or Izmir
2. Kavalla
3. Xanthi
4. Samsun

Latakia is often added to give a mixture a little more body or character. This, in turn, gives a blend a "smoky" taste and aroma.

A few brands made in Great Britain use a Perique tobacco rather than Latakia. This gives a spicy character to the tobacco.

How English Tobacco Is Cut

Most mixtures manufactured in Great Britain employ a long or ribbon cut tobacco. Because of the quality of the leaf used, especially the Turkish, it packs and burns quite well.

A few large-selling English brands are made with a "curly" or circular cut, which is quite difficult to manufacture. In this procedure, the tobacco leaf is spun into "ropes" by means of a machine similar to those used for spinning hemp ropes. The thickness of the "rope" varies in diameter from $\frac{1}{4}$ " to $1\frac{1}{4}$ ". The ropes are in turn spun into rolls and then subjected to pressure which has the effect of turning the tobacco dark brown to jet black. The twisted tobacco is next submitted to a cutting machine, producing the characteristic circles of curly tobacco.

The usual procedure for manufacturing slice or plug cut (which the English refer to as flake cut) tobacco is to first form a cake in a mold, measuring about sixteen inches long, twelve inches wide and one inch thick. This is then subjected to great pressure, after which the cake is cut into bars of the desired width. These, in turn, are sliced into smaller cuts.

A few English brands are packaged as straight Virginia, using a slightly thicker version of a fine cut tobacco (about fifty cuts to the inch), or as Virginia flake (slice).

The term "Navy cut" was used many years ago by British seamen who purchased duty-free leaf tobacco, then formed the leaves into a roll. The leaf was compressed by winding a string around it. As the sailor needed tobacco, he unwound some string and cut off a slice. Today we refer to "Navy cut" as a form of flake or sliced plug tobacco.

Packaging

Since it is against the law in Great Britain to add any hygroscopic agents to pipe tobacco to help retain moisture in the finished product, brands manufactured there contain between 17% and 26% moisture. When packed in vacuum tins, freshness is assured from two to five years.

When the consumer opens a package of tobacco manufactured in the United Kingdom and finds it moist (it should feel slightly damp to the touch), he can leave the lid of the can off for a day or two to allow the tobacco to dry slightly for the best smoking results.

Most English tobacco manufactured for export to the United States is hand-packed into tins containing two ounces, or 50 grams (50 grams is slightly less than two ounces), and in multiples of these weights, i.e., four ounces or 100 grams, eight ounces or 225 grams, etc.

It is interesting to note that, because they contain no flavors or casings, English blends will smoke a good deal longer than the tobaccos manufactured in the United States. It should also be mentioned that this may involve the use of a few extra matches to get the tobacco burning properly.

Pipe smokers who use English blends will also find that

Pipe Tobaccos Manufactured in the United Kingdom

their pipe will not get as "wet" as it will with other types of tobacco. This is attributable to the fact that, where casings are used, these casings have a tendency to break down under heat, resulting in a "wet" or "juicy" residue.

The oldest known brand of pipe tobacco is John Cotton, manufactured by John Cotton, Ltd., of Edinburgh, Scotland.

C H A P T E R

X

Pipe Tobacco Manufactured in Holland and Denmark

WHEREAS the English are known throughout the world for their ability to skillfully blend tobaccos, the Dutch and the Danes are known for the manner in which they flavor tobacco.

Most Dutch and Danish tobacco factories are smaller than their counterparts in the United States. Although their basic manufacturing equipment is similar to that employed here, their casing and blending methods are generally different.

The basic tobaccos used by Dutch and Danish manufacturers are Virginia and Burley.

The Burley and the Virginia tobaccos come from the United States, Canada, and South Africa.

Because most of the blends manufactured in these countries are heavily impregnated with casing sauces and hygroscopic agents, the Dutch and the Danes refer to their export types as "Cavendish" tobaccos.

Pipe Tobacco Manufactured in Holland and Denmark

Manufacturing Dutch and Danish Tobacco

In contrast to the high speed equipment used in manufacturing tobacco products in the United States, the Dutch and Danes are slow and deliberate in their manufacturing procedures.

In order to bring out the fullness and flavor of tobacco, they utilize a great deal of steam to open the tobacco pores, then impregnate this tobacco with various casing sauces, after which it is bulked for a long period of time.

The bulked tobacco is placed into molds and subjected to extreme pressure, forming cakes measuring 16" x 16" x 1". After another period of time, during which the cake rebulks itself, properly wedding the tobaccos within, it is cut into slices of predetermined width which are referred to as bars.

A substantial amount of "top dressing" is used on completion of the blend to give it a refreshing aroma.

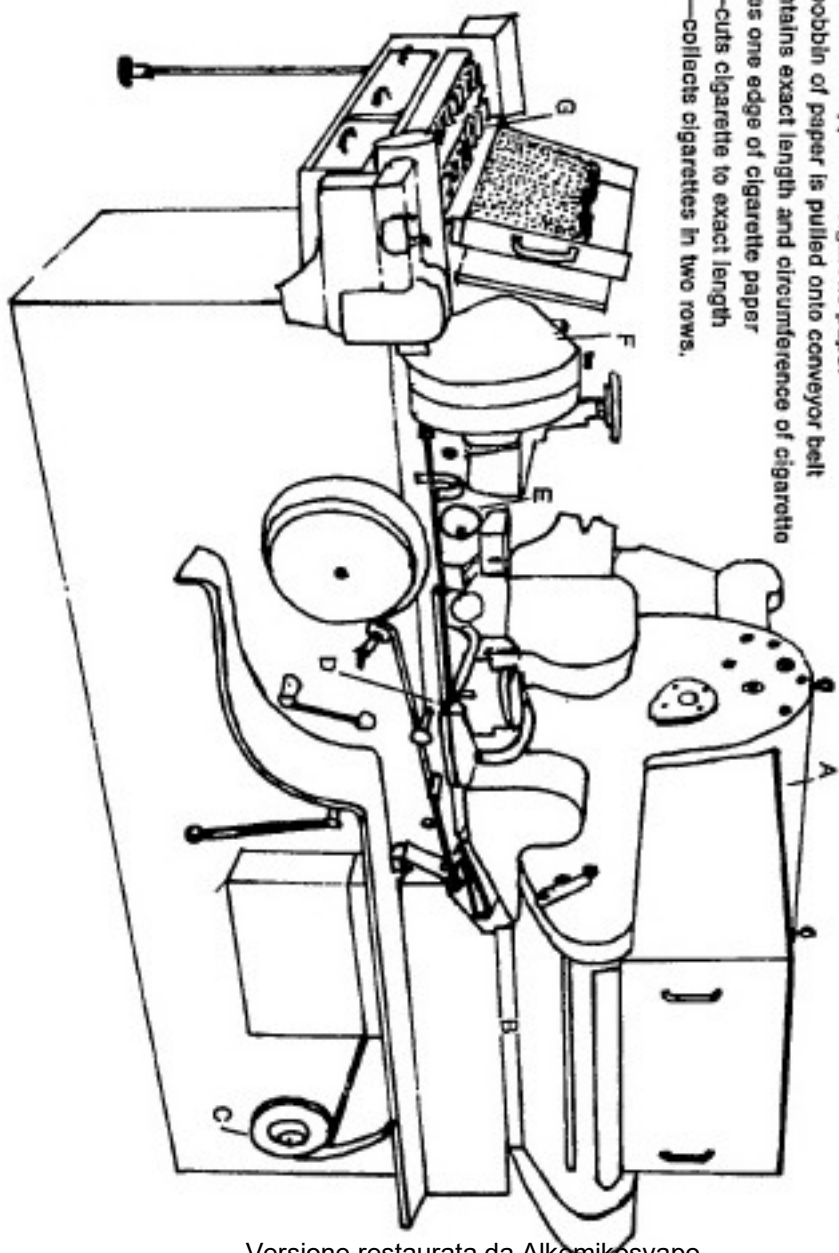
Because of the painstaking hand-labor and the length of time required to manufacture this type of tobacco, it has been very difficult to accurately reproduce it in the United States.

Pipe smokers will find that Cavendish tobaccos, manufactured in The Netherlands and Denmark, are light and impart a sweet taste and pleasant aroma.

CIGARETTES

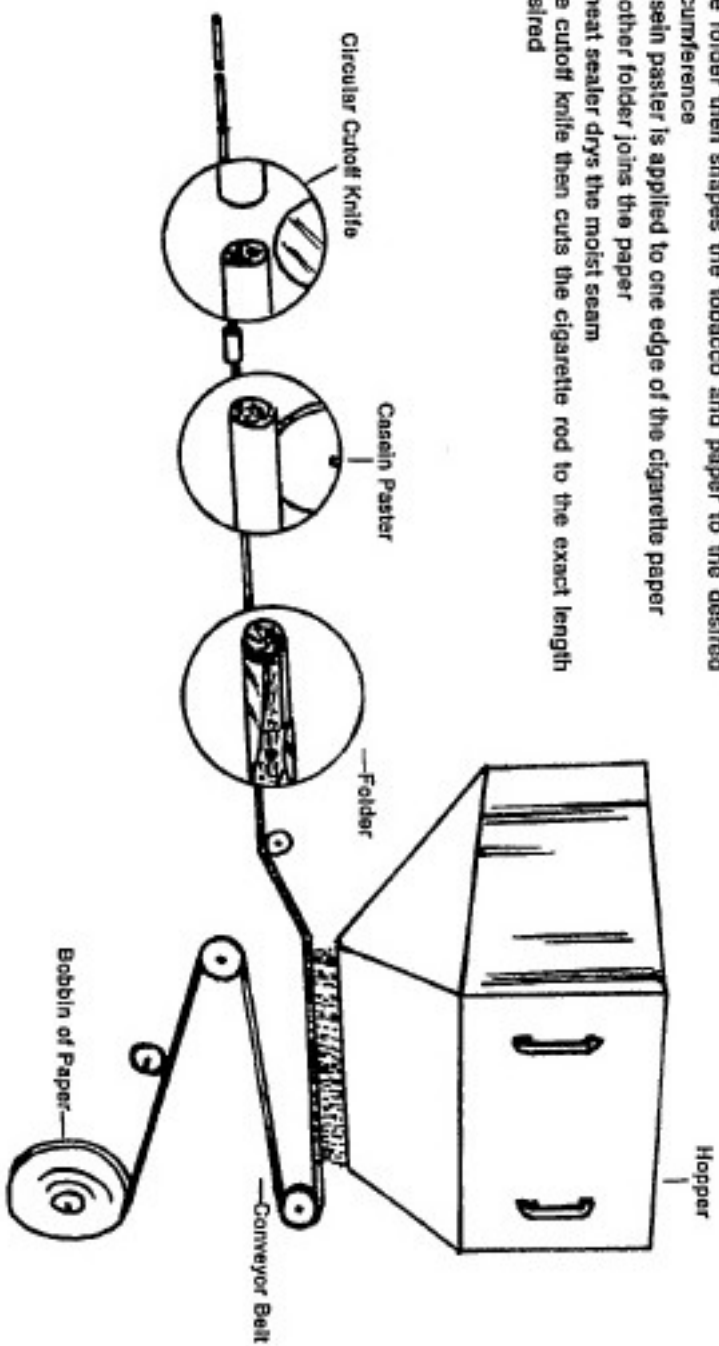
HIGH SPEED MODERN CIGARETTE MACHINE

- A. Hopper—into which fine cut tobacco is fed
- B. Funnel—tobacco is dropped on cigarette paper
- C. Paper—the bobbin of paper is pulled onto conveyor belt
- D. Folder—maintains exact length and circumference of cigarette
- E. Pastier—pastes one edge of cigarette paper
- F. Cutoff Knife—cuts cigarette to exact length
- G. Roll Catcher—collects cigarettes in two rows.



OPERATIONAL SEQUENCE

1. Cigarette paper is pulled onto conveyor belt
2. Cut tobacco is fed to paper from the hopper
3. The folder then shapes the tobacco and paper to the desired circumference
4. Casein paster is applied to one edge of the cigarette paper
5. Another folder joins the paper
6. A heat sealer dries the moist seam
7. The cutoff knife then cuts the cigarette rod to the exact length desired



CHAPTER

XI

How Cigarettes Are Manufactured in the United States

CIGARETTE MANUFACTURING became "big business" with the invention of the cigarette-making machine by James Bonsack in 1881. Prior to this time, all cigarettes were manufactured by hand—understandably a slow and costly method. The Bonsack machine produced about 200 cigarettes per minute and the royalty rights to this machine were given to James Buchanan Duke, who was to form and head the American Tobacco Company in 1890.

We have seen in a previous chapter how tobacco is processed. If we proceed from the point at which tobacco is cut, we can easily follow the steps in the manufacture of American type cigarettes. However, before we do so, we should know the four basic tobaccos used. These are:

Burley
Virginia (Flue Cured)

Turkish
Maryland —

Because American cigarettes are made up of these four basic tobaccos, they are referred to as "blended" cigarettes.

Prior to World War I, straight Turkish tobacco cigarettes were the best-selling types in the United States. However, many smokers found that they were too "heavy" and the aroma too pungent. The advent of the blended cigarette in 1916 opened a new era in cigarette smoking and within a short time it completely captivated the American market.

American blend formulas vary, of course, depending upon the brand. But to give the reader an idea of the basic ingredients used, here is an imaginary blend:

36% Burley
50% Virginia
12% Turkish
2% Maryland

The reader may be somewhat surprised to learn of the quantity of Turkish tobacco used, but the amount is substantial, especially in the manufacture of filter tip cigarettes, because filters tend to inhibit less robust flavors.

We have brought the tobacco through the blending process and the cutting. It is now fed into a cigarette making machine.

A cigarette making machine consists of five basic parts:

1. Hopper—into which the cut blend of tobacco is placed.
2. A funnel at the base of the hopper, through which the tobacco falls onto a continuous sheet of cigarette paper (which is approximately one inch wide and comes from a

How Cigarettes Are Manufactured in the United States

circular "bobbin" of paper containing enough to make 85,000 regular or 70,000 king size cigarettes).

3. A casein paster with a rotating wheel which adheres casein to one edge of the cigarette paper.

4. A Shaper (or Folder) which makes the cigarette paper fold one edge to the other, forming a circular, continuous cigarette.

5. A set of circular cutting knives which cut the continuous cigarette into the proper lengths.

As the cigarettes are finished, a small conveyor takes them to a metal tray where they are inspected.

In the event a tipped cigarette, such as cork, is desired, a tipping device on the machine applies the tip to the cigarette paper just before the tobacco is placed on it.

If a filter tip is being made, a filter tip attachment is placed on the machine near the point where the cigarette is cut to size. Filters are automatically attached to the cigarette by means of the filter wrapper which extends somewhat beyond the filter. Filters are made from a variety of materials, one of them being cellulose acetate.

The finished cigarette is then placed into a metal tray which, in turn, is placed on top of a "cigarette packer," allowing the cigarettes to fall freely down three lanes to an electronic device that inserts them into a foil wrapper. The machine tests each cigarette electronically and automatically rejects a pack if even one cigarette is faulty or has been damaged. The foil package is wrapped with the outer covering, or label, and the package is presented automatically to a cellophane machine. Depending upon the brand—

A regular cigarette is 70 mm. in length.

A king size cigarette is 85 mm. in length.

A king size filter cigarette is 70 mm. in length with a 15 mm. filter.

A 100 mm. cigarette is usually made up of an 85 mm. cigarette, plus a 15 mm. filter, although manufacturers vary the size of their filters and a 100 mm. cigarette can have a 20 mm. filter.

Cigarettes are generally 25 mm. in circumference (one inch is equal to 25.4 millimeters).

Cigarette making machines produce approximately 2,000 cigarettes per minute.

Federal law states that in order to manufacture "Class A" cigarettes, the type that accounts for practically all of the cigarettes manufactured in this country, the weight of the cigarettes must not exceed three pounds of tobacco to each 1,000 cigarettes. In the event the cigarettes are heavier, the federal tax goes up astronomically. Three pounds of tobacco supplies about 1,300 regular cigarettes, 1,050 king size cigarettes and a similar quantity of 100 mm. cigarettes, depending on the length of the filter.

The United States government taxes "Class A" cigarettes at the rate of \$4.00 per 1,000, or 8¢ per package of 20.

Excluding the cost of tobacco, it is estimated that manufacturers have held the costs of material and labor to about one cent a package through the use of automation and other efficiencies.

CHAPTER

XII

How Cigarettes Are Manufactured in the United Kingdom

ENGLISH CIGARETTES are manufactured in the same manner and usually with the same equipment as their American counterparts.

The essential difference between English and American cigarettes is in the types of tobacco used and in the fact that all English manufacturers must conform to English law, which states that little or no artificial flavorings or hygroscopic agents may be used.

The Flue-cured tobaccos used in the manufacture of United Kingdom cigarettes come from the United States, Canada, Africa and the Far East.

U.K. cigarettes fall into one of the following categories:

Straight Virginia Cigarettes

Virginia Blended with Turkish Cigarettes

Straight Turkish Cigarettes

Straight Virginia. These cigarettes account for approximately 95% of all cigarettes made in the United Kingdom. Although excellent grades of Virginia Bright tobaccos are used, the American consumer may find that these cigarettes taste unusually sweet and burn rather hotly, compared with American cigarettes.

Virginia Blended with Turkish. Although these cigarettes represent a rather small market in the United Kingdom, the American consumer may find them a bit more palatable.

Straight Turkish. These are considered to be among the finest cigarettes of their type in the world, if the consumer enjoys the rather pungent odor that they emit. This type represents a very small market in the United Kingdom.

PIPES

.

THE GROWTH OF BRAIR



5 years' growth



10 years' growth



15 years' growth



25 years' growth



30 years' growth



45 years' growth



60 years' growth



100 years' growth



250 years' growth

Courtesy Kaywoodie Pipes

The hardness of the wood fiber and the clarity and density of the grain determine the value of the burl, which in turn will influence the price of a pipe.

CHAPTER

XIII

How Briar Pipes Are Manufactured

THE BRIAR PIPE was born one day in 1821, shortly after the death of Napoleon, when a Frenchman on a pilgrimage to Corsica, to pay homage to his hero, dropped his meerschaum pipe. In desperation, he commissioned a Corsican carver to fashion a pipe, using the only wood available, from the locally-grown heath tree.

The shrublike heath tree, from which all briar comes, stands no more than ten feet high and grows mainly on the barren, rocky shores surrounding the Mediterranean Sea (principally in Sicily, Greece, Spain, Algeria and Corsica). Here the rainfall is minimal and plants must fight for their existence.

The roots of the heath tree grow downward from an exceptionally hard knob of wood known as the burl, lying just beneath the surface of the ground. The burl serves as a protective cover for the briar which lies within it. Among the grainiest plants on earth, these burls grow from ten to thirty inches in depth and width and have been known to weigh as much as 500 pounds.

Briar burls are difficult to locate because the trees from which they are cut must have been maturing for a minimum of 25 years before the burl reaches a stage that is suitable for pipe manufacturing. It is generally believed that the older the briar burl, the harder and more seasoned it becomes. Briar burls have been found that have been growing for over 250 years. As with the other forms of wood, briar burls vary in texture, density and grain, depending on the climate and soil.

Once the briar has been found, the task of turning it into pipe bowls is more complex than one might have realized. The briar undergoes the following stages of preparation:

Stage I—The briar burl is cut into small blocks, roughly the size of pipe bowls, that are known as ebauchons. These ebauchons are then graded as to size and placed in bags holding 200 to 225 pounds of briar. When the moisture has evaporated from these ebauchons (about 20%) the bags will weigh 160 to 170 pounds. Of the approximately 1,000 blocks, or ebauchons, received by manufacturers in burlap bags, there is no way of knowing how many will become \$2.00 finished pipes or \$250 finished pipes, although when a manufacturer purchases a bag that has been graded excellent, his chances of eventually producing a finer pipe are considerably enhanced.

Stage II—The curing of the wood is an important process, and the method of curing depends on the specifications of different manufacturers. The primary objective in curing the briar is to remove all tars, resins and moisture. The usual method is to boil the briar in water for a period of from twelve to twenty-four hours. The briar is then allowed to dry in special storing areas for a period of from three months to four years. After they are dried, the blocks are placed in burlap bags and sent to manufacturers.

How Briar Pipes Are Manufactured

Among the curing methods specified by some manufacturers are the following:

a. Baking the briar under controlled heat, which sweats out any remaining tars, resins and sap. Some experts think that this makes the briar more porous and heat-resistant.

b. Boiling the briar in a mixture of peanut oil and beeswax and then subjecting the briar to a redrying process, for two years.

c. Sandblasting the briar under 100 pounds of pressure to the square inch, removing all of the soft wood.

Stage III—The briar block is fed to special shaping blades, cutting the block, both inside and outside, into the general shape of a bowl. This is referred to as "frazing" the pipe. A frazing machine is really a duplicating device, which follows the outline of a metal dye, cast in the shape of the pipe bowl to be duplicated. Skilled lathe operators are employed to ensure a uniformity of thickness to the wall of the pipe bowl.

Stage IV—After completion of the frazing operation, the bowls are inspected and segregated as to color, grain and flaws. Perhaps surprisingly, few of any 1000 pipes inspected will be classified as "clean" or of an excellent grade. If a pipe manufacturer obtains more than three such bowls, from any thousand ebauchons, he considers himself quite fortunate. At this stage, the bowl is referred to as a "stummel."

Stage V—The shank and air passage are bored, also by skilled workers, who must maintain tolerance of up to one five hundredth of an inch.

Stage VI—The tenion (that part of the stem into which the shank is fitted) must also be bored, and this too requires great skill, because a friction fit is desired.

The final stages include sandblasting, polishing and grading—before the pipe is packaged and ready for the consumer.

C H A P T E R

XIV

How to Buy a Pipe

THE SELECTION and purchase of a briar pipe is a highly individual undertaking; every pipe smoker should consider the following questions before making his purchase:

1. Where will I do most of my pipe smoking? At home, at the office, on the street, in my den, in the factory or outdoors?
2. Will the pipe I select fit my physical characteristics and personality?
3. How much do I wish to spend for my new pipe?
4. How do I know that I am getting a good value?

Let us take one question at a time and try to arrive at the proper answers—for you.

The Pipe That Is Selected for—

a) Smoking at the Office—Since you will be reading or writing at the office, a straight-stemmed pipe is suggested. This will keep the smoke out of your eyes.

How to Buy a Pipe

b) Smoking on the Street—A short, straight-stemmed pipe is suggested for street use. You'll be less likely to inadvertently hit passersby or to jam the pipe into your mouth while looking in store windows.

c) Smoking in the Den—A curved stem pipe is recommended for relaxed smoking because it reduces the pressure on the teeth and can be rested on the chin.

d) Smoking in the Factory—A short-stemmed pipe would be most suitable for the factory, because it will be lighter and you will not need to remove it from your mouth repeatedly, leaving your hands free for longer periods of time. A short-stemmed pipe will also afford you greater visibility while you are working.

e) Smoking Outdoors—A short, curved-stem pipe will be the most appropriate for hunting or fishing. Here again, you will have excellent visibility and your hands will be free. All outdoorsmen should use a pipe cap to prevent windblown ashes from starting a fire.

Physical Characteristics and Personality

When you select a pipe, remember that while it should serve a function, it should also flatter the appearance. Young men look well in medium size straight pipes, such as bulldogs or pots, while tall men can carry a Canadian pipe or a lumberman type pipe very well. The man who is small, and the studious type, seem to look well with curved stem pipes and bowls selected to be in proportion to the face.

If your dental grip is less than strong, a curved pipe, which rests on the chin, would be appropriate. There are pipes available for those who wear dentures or who are exceptionally sensitive to weight on the teeth.

POPULAR PIPE SHAPES



Slim Billiard



Large Billiard



Medium Billiard



Pot, Saddle Bit



Large Billiard



Large Pot



Canadian



Slim Apple



Yacht



Medium Apple



Slim Dublin



Slim Pear



Author



Poker



Prince of Wales



Small Full Bent



Bulldog



Large Full Bent



Squat Bulldog, Saddle Bit



Oom Paul



Churchwarden

The Price to Spend for a New Pipe

Many new pipe smokers start with the idea that they will first purchase an inexpensive pipe, reasoning that once they become used to a pipe, they will invest in a better one. Although there are satisfactory pipes in the inexpensive range, this is not necessarily a good idea. The reason: a better pipe generally offers a cooler smoke and greater satisfaction. Then again, if you invest in a better pipe, the pipe will give you many years of service.

The new pipe smoker should purchase a pipe in the \$5.00-\$10.00 range, manufactured by a reputable firm. As a matter of fact, since it is mandatory that a pipe be "rested" between smokes, the new smoker should purchase two pipes.

The new pipe smoker should also bear in mind that the first thirty days will be distracting. He is experiencing a completely different tobacco taste, and he is learning an entirely new set of hand movements.

How Pipe Values Are Determined

Before entering your favorite tobacco shop to purchase a pipe, it would be well to consider some of the following factors that influence the price that you will pay:

1. The grain of the briar
2. The color of the briar
3. The weight of the briar
4. The flaws in the briar
5. The size of the pipe
6. The quality of the workmanship
7. The type of stem used

How to Buy a Pipe

8. The availability of fine briar at the time of your purchase

9. The reputation of the pipe maker

Let us now examine each of these factors, with a view towards your purchase.

1. *The Grain of the Briar:* Experts recognize two outstanding types of grain which they call either straight or birdseye.

In the case of a so-called straight grain briar, if the grain pattern runs up and down the length of the bowl in fine, straight lines, and if the bowl has no flaws, you can be assured that the cost of this rare piece of briar will be quite high. And the price of the pipe will increase, depending on the amount of bowl surface that offers this grain. If the straight grain is visible only on portions of the bowl, the cost of the pipe will be less.

A birdseye graining appears as a series of tiny dots on the sides of the bowl only. These briars are indeed rare. They are also considered quite porous, giving the smoker a cooler, drier pipe.

2. *The Color of the Briar:* The beauty of a briar is made evident through staining and polishing. Good pipes are stained repeatedly and buffed with wax to bring them to a high gloss and luster. Inexpensive pipes are not subjected to this painstaking treatment.

Some "virgin" or "natural" pipes, however, are also of excellent quality, and care is taken in their manufacture. A "virgin" finish refers to a pipe that has not been stained, and a "natural" finish refers to a pipe that has been stained only lightly. Pipes without stain or with very little stain cannot easily hide any flaws.

Although staining and waxing have a very slight effect on the porosity of briar, these treatments in no way affect the smoking qualities of a pipe.

3. *The Weight of the Briar:* Well aged, well cured and well made pipes are light in weight. The pipe smoker will find further that even large pipes of excellent quality are light and can be held in the mouth easily. Conversely, less expensive pipes are heavier to hold and do not have the fine smoking qualities of their aristocratic cousins.

Many smokers prefer *sand blasted pipes*. With these, all the "soft" wood on the outside of the bowl has been removed (the process involves subjecting the bowl to a spray of air-blown pellets), leaving a multi-ridged effect. Sand blasted pipes are cool smoking because the combination of ridges and valleys offers a greater cooling area.

4. *Flaws in the Briar:* The chances of your buying a "perfect" pipe for less than \$20.00 are remote. Only approximately three stummuls out of every thousand that a manufacturer receives are graded as "clean." However, you can purchase a good pipe at a very reasonable price (\$5.00 or more) that may last you a lifetime.

Realizing that flaws, or the lack of them, affect the price of a pipe, the buyer should be aware of their nature.

Flaws on the outside of the bowl are difficult for the layman to spot. These flaws are usually filled with a pipe putty and then stained and buffed. Small defects on the outer surface of the bowl, however, will not affect the smoking quality of the pipe. And if they are classified as second, they may provide the pipe smoker with a bargain.

Flaws on the inside of the bowl are another matter. If the pipe buyer discovers depressions, rough spots or holes in the wall of the bowl, he should be wary. For these may affect the

How to Buy a Pipe

smoking qualities of the pipe and cause the pipe to burn through, thus making the pipe useless.

5. *The Size of the Pipe:* Generally, the larger the size, the more expensive a pipe will be. Many hand-carved pipes of a large size offer a cooler smoke, because there is a larger area to dissipate the heat.

6. *The Quality of the Workmanship:* The perfection of the briar, the shape, the finish and the type and fit of the stem are all indications of the quality of the workmanship of a pipe and can be readily perceived. These all play a part in determining the price of a pipe.

7. *The Type of Stem Used:* The most expensive stems manufactured are made of rubber. The hardened material is difficult to bite through yet has resiliency.

Another popular stem material is Lucite, which also offers resiliency. And a third material used for this part of the pipe is nylon, which has great tensile strength.

The most inexpensive stems are manufactured from Buterates of various kinds and are produced in plastic molds. These do not hold up for long periods of time under constant biting.

8. *The Availability of Fine Pipes:* In recent years, because of the heavy demand for fine pipes, manufacturers are confronted with the problem of obtaining top-grade briar. If you are fortunate enough to obtain a very fine pipe, treasure it, for it will probably be the best investment you can make in terms of enjoyment and pleasure.

How to Care for Your Briar Pipe

1. Remove the ash gently. Do not rap your pipe against a hard object or you will scar or break it.

2. Do not remove the stem while the pipe is still warm or you may crack it.

3. Rotate your pipes so that they cool and dry; you will have sweeter smoking.

4. After use, clean your pipe with a pipe cleaner.

5. When your pipe is not in use, always stand it up so that the juices will flow into the bowl and thus evaporate.

6. Only use a pipe reamer to cut the cake. A knife or other sharp instrument may punch a hole in the bowl.

7. When you ream your pipe, make certain that the cake is both thin and uniform around the wall. If the cake is uneven, it may cause the pipe bowl to crack or "burn out."

8. If you drive an automobile, a direct draft on your pipe will cause it to burn very hot and may burn out the bowl.

How to Enjoy Your Pipe

For the beginning pipe smoker, the selection of the proper tobacco is most important. It is recommended that initially, a very mild Burley-based tobacco, lacking Periques or Latakia, be used. In the event that a new pipe smoker desires a sweet-tasting tobacco, the Dutch or Danish blends may prove to be quite satisfactory.

It is also recommended that new pipe smokers do not smoke more than a few pipefuls each day, so that they may become accustomed to the feel of the pipe in the mouth, the taste of the tobacco and the new set of hand movements employed. It will take at least thirty days before the new pipe smoker is completely at ease with his pipe.

Breaking in the New Pipe

1. The bowl of the pipe is a small furnace. Your primary objective is to line the wall of the bowl with a thin layer of carbon so as to insulate the briar from the burning tobacco.

How to Buy a Pipe

2. Moisten the wall of the bowl with a dab of water, applied with your finger. This will help the carbon, formed by the tobacco, to cling to the wall of the bowl.

3. The heel of the bowl should be "caked" first and the "cake" gradually worked up to the rim. To accomplish this, begin by only half filling the bowl, making certain that the bowl is packed firmly but not too tightly. Loosely packed tobacco will burn hot while tightly packed tobacco will not draw.

4. The first few half-bowls of tobacco should be smoked very slowly. Contrary to popular myth, they should not be smoked all the way to the bottom unless you are a practiced smoker. The myth was dissolved when a U.S. pipe factory experimented by putting a pipe in a smoking machine and taking the temperature of the tobacco as the last few grains were smoked. The amount of heat coming through the shank went up about 40 degrees.

5. When you start to fill your pipe all the way, pack the tobacco on the bottom somewhat loosely to obtain a good draft and then press down the upper layers of tobacco more firmly. A firm top layer of tobacco will hold the fire and keep the pipe from burning hot and fast.

6. Light your pipe evenly with six or seven puffs, and after you have charred the tobacco, again relight your pipe. If the tobacco is unevenly lit, it will burn down the side of the pipe, creating an uneven "cake."

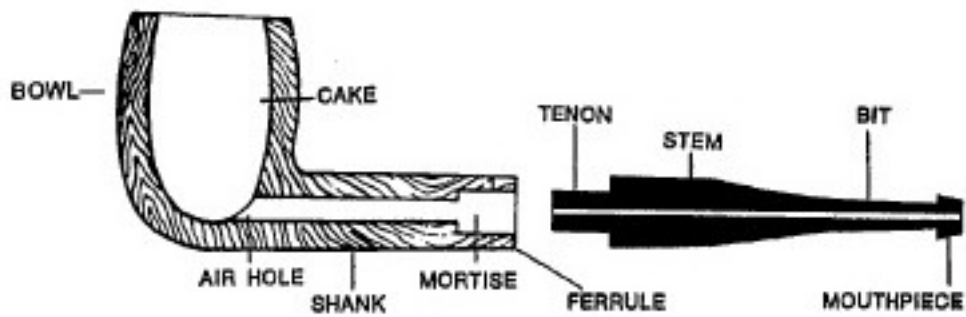
7. Try to keep saliva away from the stem of the pipe by not placing it too far inside your mouth.

8. Puff slowly. This will reduce the heat being built up in the bowl and will afford you a cooler smoke, and prevent the bowl from burning out.

9. Pipe smokers can quickly determine if they are puffing too fast by holding the pipe bowl in their hand and counting slowly to six. If the bowl is too hot to handle neither the tobacco nor the pipe is at fault. The smoker's fast rate of puffing is causing the pipe to overheat.

10. Do not rush the breaking-in period.

THE PARTS OF THE PIPE



CHAPTER

XV

Meerschaum and Other Types of Pipes

THE WORD MEERSCHAUM, which is German, means sea foam. And the word is highly descriptive because the substance known as meerschaum is really the compressed remains of millions of tiny sea creatures, subjected through the ages to geological phases, such as flooding and intense pressure. While meerschaum is found in many places throughout the world, its principal source is in Asia Minor. In Turkey, it is mined extensively.

Meerschaum is one of the most porous materials found in nature. It is also very light, and the combination of characteristics makes it one of the most highly prized pipe materials in the world.

Found from 90 to 250 feet beneath the surface of the earth, meerschaum is mined in large blocks, irregularly shaped and varying in color from white to cream to various shades of gray. When the outer surfaces are cut away, the blocks are graded and selected on the basis of size, color, texture and shape. Before it is shipped to manufacturers around the world,

Meerschaum and Other Types of Pipes

meerschaum is air-dried and generally cut again into irregularly shaped three-inch blocks, which are lightly waxed.

HOW MEERSCHAUM PIPES ARE MANUFACTURED

The first step in manufacturing a meerschaum pipe is to soften the block in water. Then the desired shape is cut from the block with a knife. The meerschaum is then dried and turned on a foot-operated wooden lathe, to finish the bowl. Interestingly, 95% of all meerschaum pipes are *hand cut* into popular shapes. Less than 5% are hand-carved.

After the outside of the meerschaum pipe bowl has been shaped, an air passage is drilled in the shank and a suitable stem is fitted. The bowl and shank are then smoothed with fine sandpaper and dried bullrushes and suspended in a hot beeswax solution that gives the meerschaum a high finish and enables the pipe to color. For expensive meerschaum pipes, rock amber stems are used when available. Hard rubber or amberoid stems are used on most pipes. These materials are more serviceable than amber.

How to Smoke Your Meerschaum Pipe

1. Meerschaum pipes, unlike briar pipes, need no "breaking in." You can fill your meerschaum pipe with your favorite tobacco to the rim of the bowl, and if you puff slowly, you will enjoy your pipe.

2. Because of the very porous nature of the meerschaum, the tars and resins in the smoke will permeate the meerschaum to the beeswax finish, turning it to a beautiful brown over the years.

3. If you smoke your meerschaum too rapidly, generating too much heat, the beeswax finish will run, coloring the shank but not the bowl.

4. Again, because meerschaum is so porous, continual fingering or handling of the bowl while it is warm will initiate a reaction between body acid and beeswax, giving your bowl an irregular color.

5. The meerschaum's porosity will give you a much "drier" smoke than that obtained with a briar.

6. You need not "rest" a meerschaum pipe as often as you do a briar because of its natural qualities.

How to Care for Your Meerschaum Pipe

1. Do not remove the stem from the pipe—especially when the pipe is hot—because the bowl and stem do not hold heat uniformly and the shank may crack.

2. To clean your pipe, run a thin pipe cleaner through the stem into the shank. *You need not remove the stem to do this.*

3. If you must remove the stem, wait until it has cooled. Then, with the stem facing you, turn it slowly to the left, or counterclockwise.

4. Empty the bowl after each smoke and let the air dry the pipe.

5. The "cake" in the bowl should not get any thicker than the thickness of a coin. If a heavy "cake" is allowed to build, creating an uneven distribution of heat, the bowl may crack.

6. Do not attempt to clean out the "cake" with a penknife. You may chip away some meerschaum and perhaps make a hole in the pipe. If you use a good pipe reamer, do so with care.

Meerschaum and Other Types of Pipes

7. If you break the shank or stem, it can be repaired if you place it in the hands of a reputable tobacconist.

A meerschaum pipe, properly cared for, is no more fragile than a briar pipe and can provide excellent smoking for many years.

(The meerschaum pipe smoker should be aware that pressed meerschaum is not considered to have the same fine smoking qualities as block meerschaum nor will it color as beautifully. Pressed meerschaum pipes can be purchased at a lower price than block meerschaum).

CALABASH PIPES

Among the most handsome and unusual of all pipes is the Calabash. It derives its name from the Spanish Calabaza, meaning gourd or pumpkin.

Only the long, gracefully curved neck of a variety of gourd grown in South Africa is used to manufacture Calabash pipes. After the gourd is harvested, the meaty pulp is removed, leaving a thin, woodlike outer wall, which is allowed to dry in the sun. The sun cured outer wall of the gourd is then subjected to sandblasting and polishing, transforming it into a Calabash.

No two Calabash pipes are identical. Therefore it is necessary to hand-fit the gourd, or bulbous, end with a porcelain or meerschaum bowl. These bowls have small holes at the bottom, and great care is taken to make certain the bowl is airtight and that smoke may only be drawn through this small hole.

The Calabash is completed when the pipe is fitted with a push bit stem.

Among the outstanding characteristics of a Calabash pipe are:

1. Unusual shapes
2. An unusually cool smoke because of the distance the smoke must travel and because of the large air chamber immediately below the bowl.
3. A sweet, dry smoke because the curved neck of the Calabash makes an excellent trap for residue tobacco juices.
4. Lightness in weight, making them exceptionally comfortable to hold in the mouth.

Water Pipes

The exotic luxury pipe of the East, commonly referred to as the water pipe, has captured the fancy of many Americans in recent years. These pipes have many names, depending on the area of the world from which they originate. In Turkey, they are called hookahs. In Iran, the proper name is kalyun, and in India they are referred to as narghile (coconut shell) pipes.

Basically, a water pipe consists of three parts: the head or the bowl, the base or the water bottle, and the snake, or long, flexible tube with mouthpiece which permits community smoking.

The head, or bowl has a tube attached, which extends into the water bottle. When tobacco is placed in the bowl, and the water compartment is filled to a point just beneath the tube leading into it, tobacco smoke is drawn downward, passing through the water and on to the smoker.

Although the smoke is cooled and filtered by the water, it also loses some of its flavor. Some smokers, in an attempt to get more taste, substitute wine or brandy for the water. It is important that water pipes be cleaned after every third or

Meerschaut and Other Types of Pipes

fourth use, because tars and resins that remain in the bowl and mouthpiece may turn rancid after a period of time, making the smoke harsh.

Water pipes are manufactured from glass, metal, ceramics or coconut shells. An almost infinite variety of shapes, sizes and designs can be obtained from fine retail tobacco shops.

Cherry Wood Pipes

The unusual, sweet-tasting cherry wood pipe is manufactured from the wild cherrytree of the Vosges mountains in France. The cherry aroma that is emitted by one of these pipes when it is smoked comes from the cherrytree bark which is included in the manufacture of the pipe. If the bark is removed, the fragrant scent is lost.

From December to March each year, carefully selected cherrytrees are felled, trimmed and sent to storage areas for drying. After aging for three or more years in special drying hangars, the cherry wood is subjected to a steaming process to prevent the wood from splitting while it is worked. After undergoing a second drying period, the wood is ready to be manufactured into pipes.

Because cherry wood is softer and more porous than briar, it has a greater absorbent quality, and it offers an exceptionally cool smoke. Pipes made of cherry wood are available in a variety of shapes, and the pipe smoker will find them to be interesting change-of-pace pipes.

Corn Cob Pipes

For the man who wishes to smoke an inexpensive pipe, the corn cob pipe will provide many hours of enjoyable smoking.

The corn cob gives a cornsweet taste to burning tobacco which many smokers find pleasant.

A special hybrid variety of corn, with a larger-than-usual diameter to the cob, is used to manufacture these pipes. After drying in storage, the corn is husked and cut into blanks—usually three blanks to each ear of corn. The blanks are then shaved and cored on high speed lathes, after which the excess fuzz is sanded off and cavities are filled with plaster. When the excess plaster has been removed, the bowls are given a coat of shellac and are polished several times. Stem holes are bored and stems are fitted to the bowls.

Corn cob pipes today come in a wide variety of shapes and sizes, with stems to match. Inexpensively priced, with normal care a corn cob pipe can be used for long periods.

CIGARS

CHAPTER

XVI

All About Cigar Leaf

THE BIRTH of the tobacco industry marked a new page in the economics and laws of many nations, and the adventure and romance of the cigar and the people who smoked it makes colorful history.

Christopher Columbus, on his first voyage to the New World in 1492, is credited by historians with being the first man to write about tobacco. This came about after one of his men reported noticing the local inhabitants inhaling the smoke from dried leaves.

Naturally, Spain became the first country to try, and then to manufacture cigars (seegars), and from Iberia, the fashion of cigar smoking spread across Europe.

Each succeeding century witnessed refinements in the growing of the leaf and improvement in manufacturing techniques. Eventually, Cuba became the acknowledged world leader in the manufacture of fine cigars; but with the rise of the Castro regime, the quality of the leaf and the workmanship of the product deteriorated and today, history has come

full circle for Spain. Her Canary Islands make cigars that are acknowledged by the experts to be among the finest hand-made cigars manufactured anywhere in the world.

With the importation of Havana Seed into Pennsylvania and Connecticut during the early 1800's, the growing of good quality tobacco leaf began in the United States. Today, Connecticut grows some of the finest wrapper leaves obtainable.

In 1918, the cigar making machine, once considered impossible to perfect because of the varying shapes of the leaves, became a reality. Excellent quality cigars were brought within the reach of the consumer who could not afford to purchase hand-made cigars.

While there has been a decrease in the 2,000 different brands of cigars that were listed in trade directories in 1903, the eight billion cigars that are sold annually in the United States stand as a testimonial to the ingenuity of the cigar manufacturer who provides countless hours of smoking enjoyment to millions of Americans.

Cigar Leaf Tobacco

The leaf tobacco used in the manufacture of cigars is grown in many areas around the world. For the purposes of this book, however, we will only deal with those areas that produce cigar leaf used in the major cigar smoking countries.

There are three basic categories of cigar leaf tobacco, depending on its intended use:

1. Leaf grown for wrappers
2. Leaf grown for binders
3. Leaf grown for filler

All About Cigar Leaf

Wrapper is the term used for tobacco that is to be the outside covering of the cigar. Wrapper leaf, considered the most difficult to grow, is usually the most expensive of all cigar leaf.

Binder is the term used for leaf that holds the main body of the cigar, or the filler, in place.

Filler, as we have suggested, is the "bundle" of leaves constituting the bulk of the cigar.

Wrapper Leaf

The great percentage of wrapper leaf is grown in the following areas:

1. Connecticut
2. Florida
3. Sumatra
4. Java
5. Mexico
6. Honduras and Nicaragua
7. Cuba
8. Cameroons (Africa)

As with cigarette types of leaf tobacco, the primary purpose of curing cigar leaf tobacco is to accelerate the chemical changes that accompany aging and drying, under controlled conditions so that the leaf will be adaptable to its intended use.

Since cigar wrappers are the most difficult and costly tobacco to grow, and since the taste and color of the leaf play such a vital part in the eventual selection by the cigar smoker, extreme care must be taken in the curing of the leaf.

Many cigar smokers are under the mistaken impression that the lighter the wrapper, the milder the cigar; and conversely, the darker the wrapper, the stronger the cigar. In truth, some cigars with light wrappers have a "strong" taste, while those with dark wrappers can be extremely mild. Taste, of course, is a highly individual matter. Many connoisseurs of fine cigars prefer the darker (natural) wrappers for the distinct flavor they get from the natural oils in the leaf.

The Curing of Cigar Wrapper Leaf

There are two methods of curing cigar wrapper leaf, and these are (1) naturally cured, and (2) fire cured.

The basic difference between the naturally cured and the fire cured cigar wrapper leaf is in the amount of heat applied to the tobacco while in the "hanging sheds."

Naturally cured leaf depends upon a modest amount of heat for a short period of time (depending on atmospheric conditions) to remove the excess moisture from the leaf and to prevent rot. The subsequent cure occurs "naturally" in the warehouse and requires periods from one to two years.

Fire cured leaf requires a higher amount of heat that fixes the color of the leaf rapidly. In the case of Candella (green) wrappers, an artificially fast cure is accomplished, giving the leaf a distinctive, mild and dry taste. Curing time is reduced to six months.

How Wrappers Are Selected

The quality of wrapper tobacco is judged by the following four characteristics:

Physical Appearance: Ideally, wrapper should have a

All About Cigar Leaf

smooth, silky texture with a fine vein system and not be too "woody." Top grades of wrappers are free of blemishes and have a uniform color.

Taste: The taste of the wrapper must be mild and pleasant and have an aroma that blends well with the binder and the filler. The wrapper accounts for 30% to 40% of the taste characteristics of the cigar.

Elasticity: To be handled efficiently, wrapper leaf must be highly elastic.

Burning Qualities: Excellent wrappers will burn freely, not erratically.

Characteristics of Various Wrapper Types

1. *Connecticut Shadegrown*—70% of the shadegrown wrappers produced in the United States are grown in the Connecticut Valley. These tobaccos are raised beneath canopies of cheesecloth, which protect them from storms, insects and the direct rays of the sun and which maintain a near-tropic humidity level. Because of their silkiness, excellent elasticity and their ability to blend well with other tobaccos, they are considered to be among the finest wrappers obtainable anywhere in the world. Needless to say, they are also among the most expensive, often exceeding a price of \$10 per pound.

2. *Florida Shadegrown*—This tobacco is grown in northwest Florida in the same manner as the Connecticut wrapper. The leaf has an excellent appearance, is quite elastic and has a neutral taste that blends quite well with other types of tobacco. Florida Shadegrown is usually used in the manufacture of less expensive cigars. The color is slightly lighter than that of Connecticut wrappers.

3. *Georgia Shadegrown*—Grown in southwest Georgia, under cheesecloth, this tobacco has the same basic qualities as Florida Shadegrown.

4. *Sumatra*—Sumatra wrappers are considered to be the most elastic of all wrappers and are very neutral in flavor. Though the supply is not great and it is not used extensively in the United States, Sumatra wrapper leaf has an excellent, though darker, color.

5. *Java*—Wrappers from Java are heavier and darker than the Sumatra type and are used primarily in the European markets. Java wrappers are "painted" which means that they are coated with a vegetable-type adhesive. This adhesive contains fine tobacco particles that improve the color and uniformity of appearance of the leaf.

6. *Mexican*—Grown from Havana Seed, Mexican wrapper is produced in the San Andres region. Since this is a relatively new venture, intended to duplicate the Havana leaf, at this stage in its development, there is a great variance in quality and it is difficult to obtain a uniform commercial supply.

7. *Honduras-Nicaragua*—While Honduras wrapper is similar to that from Havana in appearance, it does not have the taste, burning qualities nor aroma that were formerly found in Cuban leaf. Despite this, the quality is improving rapidly, and Honduras should become a major source of quality wrappers in the near future.

8. *Cuba*—Prior to the Castro regime, wrappers that came from the Vuelta Abajo and Partido sections of Cuba were considered to be among the finest grown anywhere in the world, so far as taste is concerned. The leaves were large, glossy, quite elastic and were prized for their taste characteristics. The Havana tobacco that is grown today is not con-

All About Cigar Leaf

sidered to be of the same high quality because of agricultural neglect.

However the soil chemistry of Cuba cannot be duplicated, either by natural or artificial means, anywhere in the world. And it is estimated that from three to five years would be necessary to rehabilitate the leaf-growing areas of Cuba in order to obtain the same high quality leaf that was formerly enjoyed by cigar smokers around the world.

9. *The Cameroons*—Wrappers grown in this region have a fine, rich brown color, good burning qualities and blend well with other types of cigar leaf. However, the leaves are rather small, and the supply is scarce.

Binders

Binder leaf, because physical appearance is secondary, does not require the high standards of cultivation that apply to wrappers. The leaf is usually rougher in texture and appearance. However, in the manufacture of fine cigars, binder leaf must have the ability to blend well with other types of cigar leaf, and it must have excellent burning qualities and elasticity.

Reconstituted Tobacco Sheet

Recently, the Federal Trade Commission promulgated a slogan which it required all manufacturers of cigars to place prominently on their boxes and packages if the cigars contained any reconstituted tobacco sheet or homogenized tobacco containing *any* non-tobacco substance. The legend reads as follows: "These cigars are predominantly natural

tobacco with a substantial amount of non-tobacco ingredients."

The reason for this legend was to identify cigars containing man-made tobacco sheet as opposed to all-tobacco in its natural state. Unfortunately, the legend has created more confusion than clarification. Certain types of cigars are using reconstituted tobacco, which consists primarily of tobacco stems and water in pulverized form with no non-tobacco additives. These cigars, which are certainly not all natural tobacco, are not required presently to use the above slogan, thus creating further confusion. In addition, the reference to a substantial amount of non-tobacco ingredients is somewhat confusing in that the majority of cigars using these materials do not contain in excess of 5% non-tobacco ingredients, which can scarcely be called substantial. Efforts are presently underway to induce the Federal Trade Commission to modify its slogan requirements to end these two confusing points.

Reconstituted or homogenized tobacco is one of the great technological advances in cigar manufacturing in the last twenty years. While it has its critics, it also has its very strong proponents. The use of this material has enabled the cigar industry to withstand the inflationary pressures of the post World War II period and to offer to its customers cigars of substantial quality at a modest price.

The actual process of manufacturing this sheet tobacco is highly technical and involved. The quality of the end product is largely determined by the quality of the tobacco used in the manufacture of the sheet. The inference that quality tobacco is no longer a necessity in cigars using this product is, in the words of one expert, "wholly false." He adds that, "In addition to permitting the use of high speed cigar making machinery, the actual taste and burn characteristics of this

All About Cigar Leaf

sheet tobacco create a freer burning and milder tasting product."

The connoisseur of fine cigars, in the higher priced categories, has not accepted sheet tobacco and prefers the natural product. This type of smoker is looking for a cigar with considerably more character, strength and bouquet. He is willing to pay for it. Many cigar smokers, however, have determined that the products made with tobacco sheet are much to their liking. It is simply a case of to each his own.

Reconstituted tobacco is used in the manufacture of over 90% of all cigars produced in the United States today.

Filler Tobacco

Filler tobacco is selected primarily for taste, as well as for its ability to be slow-burning, hold fire and ash and for its aroma.

A blend that incorporates the use of heavy, medium and light-bodied filler is considered to be the most desirable in the manufacture of a well-balanced cigar.

In the manufacture of lower-priced cigars, the filler tobacco is often made up of small pieces. Hence, the term "short filler."

Practically all the filler-type leaf grown in Pennsylvania, Georgia, Florida, Ohio, Maryland and Wisconsin is used in making cigars on machines. The Pennsylvania filler tobacco has a large, dark, coarse-textured leaf of extremely mild flavor and excellent burning qualities.

Filler leaf is grown in every country that produces cigar tobacco. Mexico now grows some excellent filler tobacco in the San Andres region. Although quantities are limited, this

tobacco, from Havana Seed, possesses a unique flavor. Philippine filler tobacco, considered to be of good quality, is generally used in the United States in less expensive cigars.

Curing Filler Tobacco

Most binder and filler tobaccos are air-cured; that is, the tobacco is cured under natural weather conditions. Barns used for this purpose are well-ventilated to admit air near the ground, and the curing at this stage takes from five to eight weeks. The tobacco then undergoes a curing and aging phase in warehouses lasting as long as four years.

Types of Cigars

Although cigars can be classified into four types—large cigars, little cigars, tobacco-covered cigarettes, stogies and cheroots—we will only deal with large cigars.

The following cigars are available on the American market today:

1. Imported cigars. The quality of these varies, of course, but high grade imports are usually handmade of top quality leaf.
2. Domestic hand-made cigars.
3. Domestic machine-made cigars with long filler and natural binder.
4. Domestic machine-made cigars with long filler and reconstituted binder.
5. Domestic machine-made cigars with short filler and either natural or reconstituted binder.

All About Cigar Leaf

Colors and Shapes

Each cigar brand is classified by its manufacturer as to its shape and color, in addition to its name. The reverse side of every cigar box shows the government classification which determines the tax bracket and therefore the price range at which that cigar is intended to be sold. The least expensive cigar carries the letter "A." Those classified "G" carry a retail price of twenty cents or higher.

The six color classifications in general use are:

1. Claro (the lightest shade)
2. Colorado Claro (light to medium shade)
3. Claro Claro (Candella or fire-cured cigars with a light greenish appearance)
4. Colorado (a medium shade)
5. Colorado Maduro (dark to medium shade)
6. Maduro (a dark cigar)

There is no standard system in use today for the classification of cigar shapes, as each manufacturer uses his own imagination in naming the various shapes that he makes. The panatella of one manufacturer may vary in length and circumference from that of another. It is up to the consumer to pick the size and shape that pleases him.

How Handmade Cigars Are Manufactured

The assembly of the wrapper, binder and filler into a finished cigar by hand can be accomplished either by one very experienced cigar maker or by a team—two or three cigar makers—working with wooden molds. The first, or Spanish

HOW CIGARS ARE MADE BY HAND



Fig. 1
The three sections of a cigar, filler, binder and wrapper, are put together first by gathering the filler leaves and compressing them evenly in the shape of a cigar.

Fig. 2.
A binder leaf is rolled around the filler, forming a bunch.



Fig. 3
The bunch is next trimmed to the desired size and put aside.



Fig. 4
Next, the cigar maker trims and prepares the wrapper leaf.



Fig. 5
The bunch is then placed on the wrapper and the operator encloses it, rolling the wrapper on spirally.

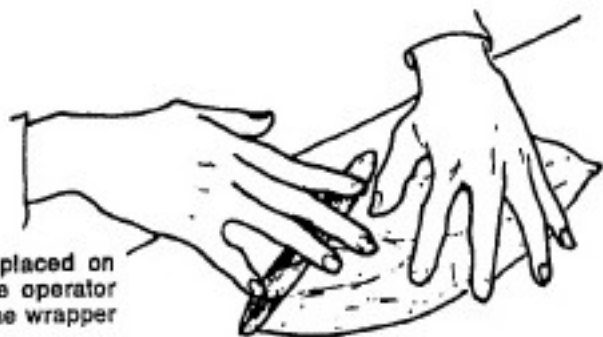


Fig. 6
The small flap at the end of the cigar is folded over the head and sealed.



Fig. 7
A tasteless and colorless adhesive is used to make the flap adhere to the body.

Fig. 8
The cigar is then rolled, on a rolling board, with a flat block, giving the finished product a uniform shape.



hand method, is the traditional way the finest handmade cigars are made.

The following steps will give you an idea of how the cigar maker goes about his craft:

Stage I—The cigar maker gathers up a sufficient number of filler leaves of several types according to the blend formula to make a particular size or shape cigar, by placing one leaf on top of the other. He then compresses them, forming the body of the cigar.

Stage II—A binder leaf is selected and rolled around the body of the cigar, which now becomes what is known as a bunch.

Stage III—In the teamwork method of making cigars, the bunches are placed on a block which usually contains twenty individual cigar molds, each the exact size and shape of the cigar desired. The upper half of the mold is then affixed into place under pressure and held in position for several hours.

Stage IV—The selected wrapper is cut to size, and the cigar maker encloses the bunch in the wrapper, rolling the latter around the bunch spirally.

Stage V—A small flap or "flag" of leaf, the end of the spirally wound wrapper, is positioned at the head of the cigar by means of a colorless, tasteless adhesive. It is then flattened, usually by pressure against the flat side of the cigar-maker's knife. This head is known as the "marble head" and distinguishes the handmade cigar from its mechanically made brother.

Stage VI—The cigar is completed when the cigar maker trims the burning end to length, which end is known as the "tuck."

Packaging

Good handmade cigars are then inspected and packed in boxes. Before being packed they are graded as to color so that all cigars in a given box are of a uniform shade.

Cedar wood or *boite nature* boxes "marry" very well with cigars, as contrasted with cardboard boxes, used for less expensive cigars. As pointed out previously, the ability of tobacco to assume the characteristics of any material that is placed in close proximity to it requires that fine cigar manufacturers be most careful in their selection of packaging materials, so that the aroma of the cigar is retained.

Why Handmade Cigars?

Cigar experts around the world agree that the finest cigars manufactured are those made by hand by skilled craftsmen. Some of the reasons:

1. Wrappers, binders and fillers are selected only from the finest grades of tobacco.

2. Whole leaf only is employed, no scrap or damaged leaves.

3. A careful selection of leaf to be used in the blend is made.

4. A greater uniformity of burn can be obtained.

5. A true marble head cannot be achieved by mechanical means.

6. Handmade cigars burn more slowly.

7. A uniform, well packed "bunch" with no soft "spots" is obtained.

In general, the finest handmade cigar is a superior product

to the best machine-made cigar. The *average* machine-made product is probably superior to the *average* handmade cigar. There are just not enough craftsmen left, and the average age of today's hand cigar-makers in this country is well advanced.

As with other consumer products, there are handmade cigars of superb quality and workmanship, as well as more pedestrian offerings. A high price alone is not a reliable guide to quality. Since the embargo on Cuban cigars, there are only a few brand names of proven quality and uniformity in this field from which to choose.

How Machine Made Cigars Are Manufactured

Of the eight billion cigars sold in the United States annually, 99% are manufactured by machine methods. These include both short filler and long filler cigars.

Manufacturing Short Filler Cigars

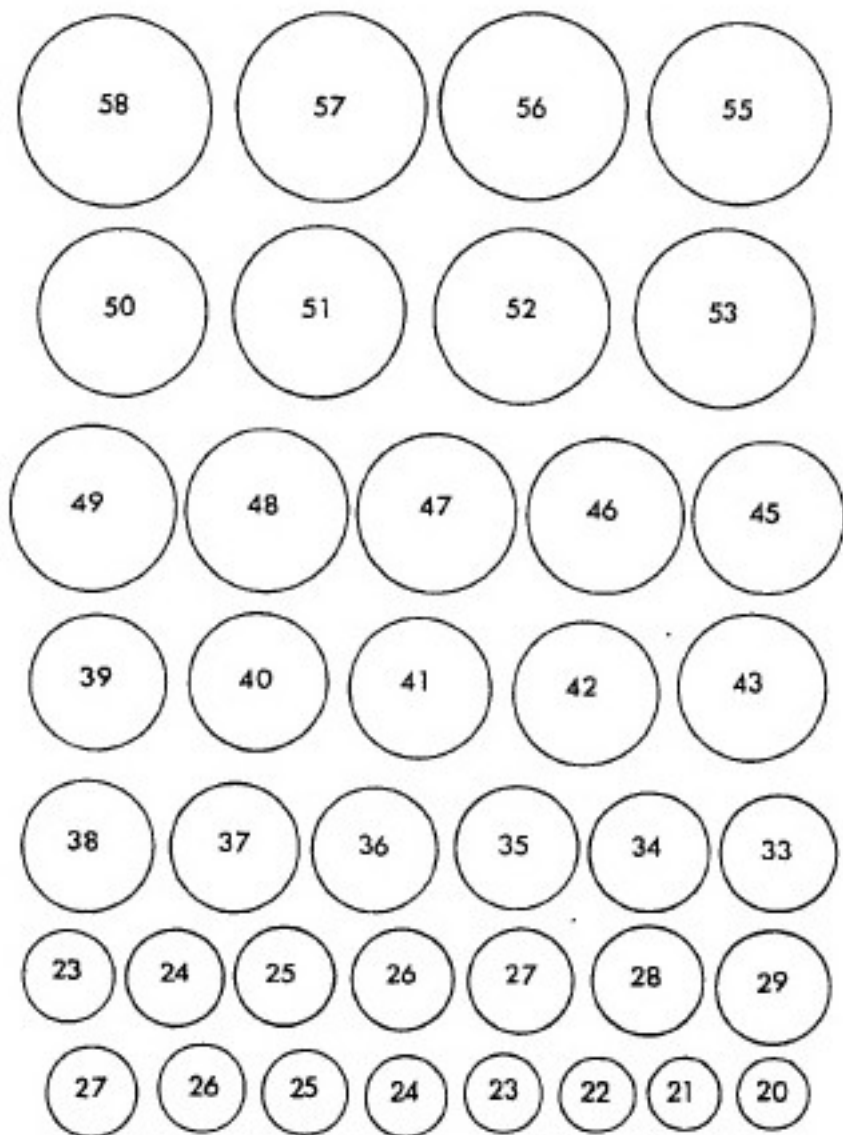
There are three types of short filler cigars:

1. Short filler with all natural leaf.
2. Short filler with reconstituted binder and natural wrapper.
3. Short filler with reconstituted binder and wrapper.

Cigar making machines today can be adapted to handle either natural leaf or reconstituted binder or wrappers, and the basic techniques of manufacturing are similar, regardless which type of tobacco is used.

When binder and wrapper are leaf-stemmed and the filler leaf is cut and blended according to a predetermined formula, the cigar making machine is ready to manufacture the cigar. The following stages are employed:

CIGAR RING SIZES



The ring size of a cigar is determined by the diameter of a cigar at its widest point. The basic unit for measuring the ring size is one sixty-fourth of an inch. For example, a 44 ring size is 44/64ths of an inch in diameter

Stage I—The filler tobacco is fed from a hopper to a series of conveyors where it is compressed and then cut to size, forming the core of the cigar.

Stage II—The binder, which is cut by the machine in the shape of a parallelogram, is fed to an air suction table, on which each leaf is held in position, ready for the filler.

Stage III—The binder is rolled around the filler core, forming the bunch, which is mechanically crimped or molded into the desired cigar shape. From here it is transferred to the "rolling device."

Stage IV—A series of rollers continually shape the cigar while it is in transit, and the final operation of placing the wrapper leaf around the cigar is done much in the same way that the binder has been applied. Mechanically operated knives now cut and trim the cigar to the desired size.

Machine-made cigars can be produced at the rate of 900 per hour, although 18,000 per hour can be manufactured when reconstituted tobacco is used for both binder and wrapper.

Advantages of Machine-Made Cigars

1. Machine made cigars offer the best quality tobacco at the lowest possible price.
2. These cigars are highly uniform in construction.
3. The machine-made product offers uniformity of blend and taste. This is especially true of short filler cigars. As many as 30 distinct types of short filler can be uniformly blended into a single cigar. A long filler cigar contains about five filler leaves, and absolute uniformity of blend is nearly impossible; this is also true of the handmade cigar.

CHAPTER

XVII

How to Smoke a Cigar

1. Make certain that your cigar is factory fresh. This means that the wrapper, which contains up to 40% of the taste, should not be bleached, and the cigar should give slightly when gently pressed. A dry cigar will burn faster and hotter than a cigar containing the proper amount of moisture.

2. To be certain that your cigar will draw well, gently pinch the top of the cigar or use a cigar cutter. It is not necessary (nor good cigar manners) to chew or bite off the head of a cigar. Many machine-made cigars have a convenient hole in the head. If you bite off the end of one of these cigars, it may unravel.

3. Light your cigar carefully and evenly, turning the cigar slowly over the flame so that combustion is achieved evenly.

4. Puff slowly. A pause between puffs enables you to enjoy the full fragrance and richness of the cigar.

5. When removing cigars from a box, be careful not to bruise the wrapper.

6. Never chew cigars. They are made for smoking. Chewing a cigar is both inappropriate and unsightly.

7. Unlike cigarettes, cigars will stop burning when you cease to puff them. It is recommended that after you have finished smoking your cigar, its remains be disposed of, rather than left in an ashtray, as a courtesy to others.

8. It is not necessary to inhale a cigar to enjoy it.

9. A cigar can be relit, once it has gone out momentarily, by barely touching the flame of a match to the tip for a few moments. A cigar that has stopped burning and has become cold will be slightly bitter, however, when relighted.

10. Cigar tobacco is significantly different from cigarette leaf. This difference is not only physical, but also chemical. Most cigar tobaccos burn freely on the leaf without chemical additives. An interesting comparison can be made by removing cigarette tobacco from its paper wrapper and attempting to ignite it. Next, subject a leaf of cigar tobacco to the same test. The experiment is recommended for well-ventilated areas only.

CHAPTER

XVIII

The Care and Humidification of Tobacco Products

PIPE TOBACCO, cigars and cigarettes must be "fresh" if complete enjoyment of the product is to be realized.

All tobacco manufacturers make a determined effort to bring their products to the consumer in perfect condition. They go to great lengths, employing the finest scientific equipment and packaging materials, to achieve that result.

Tobacco, being a natural plant product, is subject to change under the following conditions:

1. Moisture: A loss or gain in moisture content will affect the burning and taste qualities of the tobacco product.
2. Temperature: The degree of heat or cold surrounding a tobacco product can cause rapid drying or mold formations.
3. Odors: Tobacco has a natural tendency to absorb all odors with which it comes in contact.
4. Light: When tobacco is exposed to either sunlight or artificial light, even for short periods of time, it will bleach.

To help you enjoy your tobacco products to the fullest, here are a few ways to recognize, and keep your products in, peak condition:

Pipe Tobacco

Pipe tobacco, when purchased, should feel slightly damp to the touch.

If you cannot use a large tin within a week, you should place your tobacco in an adequate humidior. These are obtainable at any tobacco shop.

Do not place open containers of tobacco into refrigerators. If there are onions, cabbages or other strong smelling foods within, the tobacco will assume the taste and smell of these foods.

Do not put a piece of pear or apple into your tobacco. The tobacco will pick up the taste of the fruit and the fruit may accelerate the formation of mold.

Do not keep your tobacco near face powders, hair lotions, perfumes or camphor. It will acquire the taste and smell of these products.

If your pipe tobacco gets too dry, purchase a small atomizer and lightly spray the tobacco with water. Mix it very well. The tobacco will absorb the water rapidly. The less water sprayed on the tobacco, the better will be your results.

Cigars

A fresh cigar can be determined by feeling it. The smoker should be able to handle the cigar before purchasing, and the cigar must have some give to it when pinched between the thumb and forefinger. This is even true when purchasing

The Care and Humidification of Tobacco Products

cigars in packs. Cigars, when dry in packs, tend to bow the outside of the pack. In addition, pinching the pack slightly between thumb and forefinger will very often reveal extremely dry cigars. Cigars in prime condition have a moisture content of 12% by volume.

Cigars, like any other tobacco product, are affected by moisture, temperature, odors and light. A retailer carrying a substantial inventory of cigars should have a humidor with temperature and humidity controls. Ideally, he should be able to maintain a 50 degree temperature and a 68 to 70% relative humidity. Retailers who maintain a modest inventory probably do not need to be concerned with temperature. However, they should maintain the proper degree of humidity which is easily done with any of a number of cigar case humidifiers.

While cellophane is excellent in protecting cigars from breakage and keeping them clean, it will not protect a cigar from drying or fading under light.

You as a consumer can best keep your cigars fresh in a humidor which contains a moistening device. For short term storage, a box of cigars can be placed inside a plastic turkey or sandwich bag, which when properly sealed will maintain the moisture level for a period of time.

The remoistening of cigars is a little tricky. One of the best methods is to use the same polyethylene or Saran sandwich bags. If the cigars are cellophaned, the cellophane should not be removed but should be open at both ends. The cigars should then be placed in the bag, complete with a small piece of household sponge which must be absolutely clean. The sponge should be moistened and then wrung out slightly so that it is not dripping wet. The sponge should not be in direct contact with the cigars, which is the reason for not removing

the cellophane. This method should take three or four days, if the cigars are extremely dry.

Fine cigars will not deteriorate with age if kept under proper humidification. However, it must be remembered that cellophaned cigars cannot be aged. If you have a good humidifier and fine cigars, remove the cellophane so that the cigars may intermarry, thus improving their flavor and aroma.

As with pipe tobacco, no cigar humidifier should have organic matter in it, such as blotter, paper, apples, etc. While this matter may moisten the cigars, it tends to mold rapidly, giving off odors that will be absorbed by the cigar. Do not place cigars near powder or camphor, for again, they will absorb all odors they come in contact with. If cigars are placed in the refrigerator, be certain that there are no vegetables or fruits within to contaminate the cigars' taste and aroma.

Any good retail tobacconist carries a line of cigar humidors and for a small investment, your cigar smoking pleasures can be increased.

Cigarettes

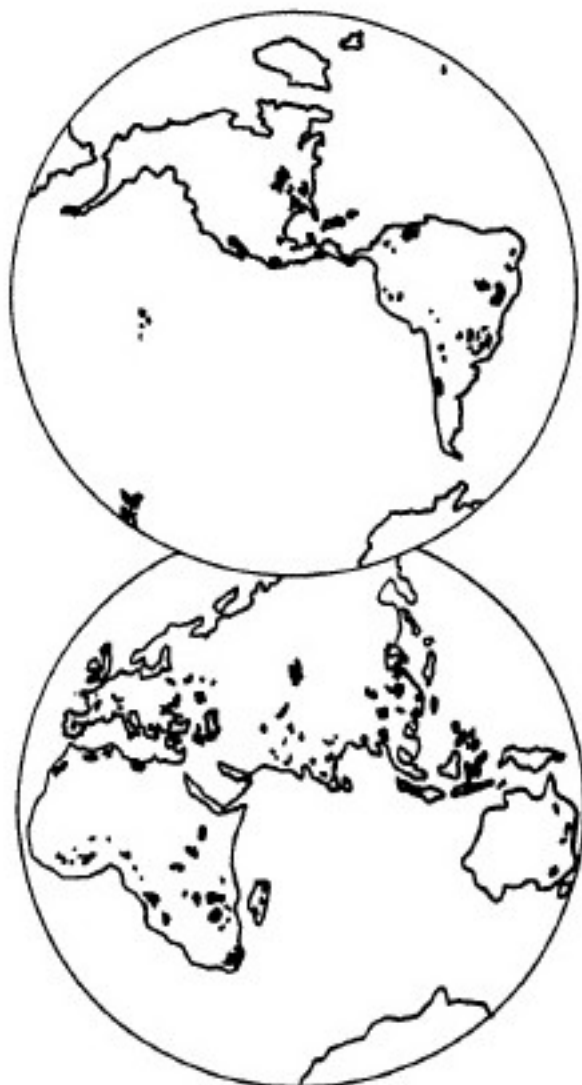
All cigarette manufacturers in the United States employ the latest scientific methods to insure freshness in their products.

Cigarettes manufactured in the United States contain moisture-retention materials which give them a "shelf life" of up to one year.

For the retailer, stock rotation under normal temperature conditions is the best method of keeping cigarettes "fresh."

The consumer should bear in mind that when the cellophane on a cigarette package seems too tight, the cigarettes within may be starting to dry out.

TOBACCO GROWING REGIONS
OF THE WORLD





Milton M. Sherman has spent more than thirty years in the tobacco business. After leaving the University of Wisconsin, he went to work for The American Tobacco Co. in their sales division. In 1939, he joined Frank Riggio, formerly national sales manager of American to launch one of the first successful "king size" cigarettes in America. His career was interrupted by World War II, when he served in Africa, India and China, moving up in rank from private to major. He resumed his affiliation

with Riggio Tobacco Corp. after the war and has since held executive sales positions in the packaging industry and most recently with one of the country's most prestigious tobacco retail and distribution organizations. Mr. Sherman, who is known as Milt wherever tobacco products are made or sold, has written this fascinating and definitive book in the hope that tobacco men and tobacco consumers, alike, will find increased enjoyment in the products, about which there is much misinformation and much little known fact.