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MAJOR RAGLAND'S

INSTRUCTIONS

HOW TO GROW AND CURE

TOBACCO,

Especially Fine Yellow.

CAREFULLY REVISED BY HIM AND INTRODUCING THE
LATEST AND BEST EXPERIENCE
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(1885)

of curing. The roof is so constructed, conforming to the plan of the tiers below, as to contain three tiers above the joist, varying in length. Such a barn will hold about 650 to 700 sticks of medium tobacco, six plants to the stick. To prepare for curing brights, it must be chinked and daubed close inside and out.

Flues and Flue-Curing.

Flues have almost entirely superseded charcoal for curing yellow tobacco, as being cheaper and better every way. The heat is more readily controlled by the use of flues—an important item in successful curing—and the tobacco cured therewith is cleaner, brighter and sweeter than that cured with charcoal. The flue is moreover the best mode for applying heat in the curing process for *any type* of tobacco requiring the application of artificial heat, and may be used to good advantage in drying out and seasoning those types cured mainly by the sun and air, and preserving them from injury. Its use is fast “superseding the open wood fire with its objectionable smoke,” as predicted by the writer years ago.

The following cut represents the “Furnace and Pipe” flue, more extensively used at this time than any other, and is not patented. It is cheap and reliable, easily controlled, safe, and may be relied upon to work well.

Cut out two or three logs from the end of the barn as represented by the brick work (see diagram). Then first construct the two furnaces A B and A B with brick or stone, as follows: Let the mouths of the furnaces, A A, project fifteen inches outward beyond the wall—the cut fails to show the projection properly—and extend the furnaces to B B, about five and a-half to six feet. The outer walls of the furnaces should

be about fifteen inches distant from the logs or sills of the barn. Build the walls of the furnaces eighteen inches apart and eighteen inches high at A A, running back to fourteen inches high at B B, and let the bottom of the flues slope upward from four to five inches from A A to B B. The furnaces should be arched with brick or covered with fire-proof stone, or No. 16 or 18 sheet iron, from A to B.

Be careful to see that the furnaces at every point are so constructed as not to come in near contact with the sides or walls of the barn, lateral or vertical, and that the exits of the pipes are protected by brick or stone, as seen in the diagram.

Insert sheet-iron pipes at B B on cast-iron eyes made for the purpose and placed into the ends of the furnaces, as near the tops thereof as possible. The eyes are not absolutely necessary, but they greatly protect the pipe from burning, and being fixed into the ends of the furnaces, the pipe is more readily adjusted. For a 20 by 20 feet barn use pipe eleven or twelve inches in diameter—for barn 16 by 16 feet use ten inch pipe. Extend the pipe all around from B B to D D, with a gradual elevation of one foot rise from B to C, and with two feet elevation from C to D. Cap the ends of the pipes with an elbow.

For small barns, the pipes may be brought together midway between C and C, by a V shaped connection into one twelve-inch return pipe, through the middle of the barn. This flue operates well and is very popular with the planters working a small force and using only small barns, which are better for them than large ones, and is the cheapest good flue made.

Any tinner can make the pipe, and foundries and hardware stores furnish the eyes. The cost of pipe varies from six and a half to seven and a half cents per pound, and ten inch cast eyes cost about two dollars a pair, and twelve inch eyes about two dollars and fifty cents. The cost of piping for a small barn varies from eight to ten dollars.

Patented flues cost more, and some of them are well worth the difference in the cost over the plain flue. The "Regulator" is one of the best, and costs very little more, and as a fuel-saver alone will more than compensate for difference in cost in one season's curing. By the use of this flue the heat is more easily under the control of the curer—the temperature being regulated at will by throwing the heat into or out of the barn. The "Regulator" is manufactured at South Boston, Va.

Selection of Seed.

There is no farm crop grown as a staple in the United States that pays better than *good* tobacco; and to grow good tobacco requires, in the first place, good seed; for good seed is at the foundation of all successful farming, and more essential, if possible, as regards tobacco, than in any other crop. For in this, the range of types, grades and prices, are wider than in any other crop, while the seed affect and control all these more than any other factor. Soil, climate and management, next to variety, operate to determine the character of the product.

The variety must be suited to the type which the planter intends to raise, and the soil must be adapted to the type, or failure is certain.

Bright yellow tobacco cannot be produced on dark rich soil, nor rich dark "shipping," on poor gray soil; nor will the rich coarse varieties produce fine silky yellow goods, or the thin silky varieties make heavy, fat, tough export tobaccos.

There has been a wonderful improvement in varieties of tobacco during the past generation—improvement by selection in the old kinds and the introduction of new varieties, with superior qualities and characteristics for every type of tobacco. None but an old fogey will continue to plant the old, unimproved varieties because they were his father's or grandfather's favorites. The world moves, seeds are improved and industries developed and advanced. Our ancestors succeeded with the varieties of tobacco they planted, when there was mainly but one type—the dark shipping—but taste and fashion change, new types are wanted and new varieties suited to these types; and planters, who meet the demand are those who make the most money by tobacco planting.

Where is the successful farmer who now sows the old wheats once used by his ancestors? Look at the improvement in varieties in vegetables, fruits, farm and horticultural, in the past century. Seeds, like animals, are greatly improved by propagation of selections and judicious crossing; and, especially is this true as regards the improvement of seeds, when carried on under the most favoring conditions of development as to soil, climate and cultivation. Virginia is the home of the tobacco plant, and here it develops to the highest perfection, and consequently here have originated the best and finest varieties. She grows now all the types used in plug tobacco and for pipes and cigarettes; and she has some sixteen hundred square miles of soil suited to another type, Cigar Tobacco, and these soils lie mainly in the Piedmont country, where our people are striving to compete with the West in growing grain. Here is an opportunity that ought to be improved.

It is a recognized fact that where any flora develops to greatest perfection, there is where the *best* seed can be grown. It would pay planters in the South and West, who grow the yellow and dark export types, to get their seeds every year from Virginia, as market-gardeners get seeds from localities where the several varieties develop to greatest perfection, rather than grow their supplies at lower cost, but under less favoring conditions, as to adaptability of soil, climate, &c. They know where to get the best, and are aware of the tendency to degeneration in seeds generally, and the importance of "a frequent recurrence to first principles," to promote healthy normal growth and maturity.

Planters have no excuse for using poor seed when pedigree seeds of all types may be so cheaply procured. The cost of tobacco seed per acre ranges from ten to twenty cents—the cost for seed of no other farm crop is so little.

Varieties for Specific Types of Tobacco.

We will premise by stating that only an approximate guide may be given for the selection of varieties suited to the several types. The variation in soil and climate, in different localities, greatly modify the selection. For, what is best in some localities is not best in others; and trial, at last, must determine what is best in every case. When this is found,

it is well to stick to it and plant mainly of this variety, and sparingly of others, until a better is found, if possible.

We recommend for dark, heavy shipping, *Medley Pryor*, *Blue Pryor* and *Johnson's Green*.

For mahogany wrappers, *Tuckahoe*, *Sweet Oronoko* and *Gold-Leaf*.

For cutters, use *Gooch*, *Hester* and *Tuckahoe*.

For fine yellow wrappers, use *Tuckahoe*, *White-Stem-Oronoko*, *Yellow Pryor*, *Yellow Oronoko* and *Hester*.

For sweet fillers, *Sweet Oronoko* and *Flanagan*.

For yellow fillers and cigarettes, *Hyco* and *Silky Pryor*—the latter makes fine wrappers on some soils.

If the planter finds, after trial, that any variety fails to do well on his soil, let him discard it, make a note of it, and select another.

The *White-Stem-Oronoko*, *Yellow Pryor* and *Yellow Oronoko* are varieties that rarely fail to make fine wrappers, wherever such can be grown.

The *Tuckahoe* is a new candidate for favor, and deserves extensive trial, as it has proved, in Virginia, to produce the richest yellow goods of any other—a grade now much in demand. Its comparative freedom from spot and burning is greatly in its favor, having proved nearest of all to be drought-proof.

The *Sweet Oronoko*, for plug fillers, has never been excelled.

The *Hester* and *Gooch* succeed best in some localities for brights or cutters.

Hyco is decidedly the easiest of any to cure yellow; requires a moist, but not wet, gray soil; rarely succeeds on red or thirsty soil.

The *Tuckahoe* and *Hester* possess a wider adaptability to soils and types than any others.

Preparation of Plant Beds.

There are two modes for raising plants—in hot bed or cold frame, or in the open air—one or the other of which has preference according to locality; the former being more practised north of forty degrees latitude, while the latter is preferred south of that line. We will here give both, that planters may choose.

THE HOT BED.—Select a southern or southeastern exposure, sheltered on the north, dig and shovel out a space five by twelve feet, or any required length, to the depth of eighteen inches. Place straw to the depth of three or four inches in the bottom of this trench, and cover with fresh unrotted manure from the stable to the depth of six or eight inches; then cover the manure with soil—woods-mould is best—five inches deep, and surround the bed with planks twelve inches wide on north side and six inches wide on the south. These will make a frame over which sections of canvas covering should be placed to keep the bed warm, promote growth, and protect the plants. These sections may be made of frames five feet long and three feet wide, with common domestic cloth tacked thereon as a covering, and they answer every purpose as glazed sash, are cheaper and less destructible, and may be used for several years to grow tobacco or horticultural plants. Once used, you will be loth to do without them for the latter purpose. But, to return. Tobacco seed is

sown on the bed thus prepared at the rate of two teaspoonfuls to a bed five by twelve feet. To sow regularly, mix the seed with a fertilizer, ashes or plaster, and sow in drills three inches apart. A bed twelve feet long will require four sections of canvas covering, which are light and handy, and may be put on or off, or adjusted at pleasure. When the plants have pretty well covered the surface of the bed, remove the canvas during the day, and only replace them when there is danger of frost, or to keep off the flea-bugs. There is the advantage of having earlier plants by this mode and perfect security against the flea-bug, which will repay for the additional cost of raising at least a portion of the plants needed for the crop by this safe mode.

OPEN AIR BEDS.—But there is no question that open air beds are cheapest. And where this mode of raising plants is practicable, it is greatly to be preferred for the main supply of plants. It is a well-established opinion that plants raised in the open air stand transplanting better and usually grow off quicker than plants raised in hot bed or cold-frame.

SELECTION OF LOCALITY.—On the selection of a proper locality for a plant bed, and its preparation, largely depends the timely supply of strong, healthy plants, without which it is impossible to raise a crop of fine grade. The planter, therefore, cannot be too careful in choosing a sheltered spot, neither too wet nor too dry, as rich naturally as can be found, and located so as to possess different degrees of moisture.

Go into the woods, original forest, if possible, and select a spot near a branch or stream of water, embracing both hillside and flat, and having a southern or southeastern exposure, protected by woods on the north. Burn over the plat intended for plants, either by the old or new method. The first consists in placing down a bed of wood on small skids three to four feet apart on the ground, well cleared and raked. Then fire this bed of wood and permit it to remain burning long enough to cook the soil brown for half an inch deep. With hooks, or old hoes fastened to long poles, pull the burning mass of brands a distance of four and a half or five feet, throw on brush and wood, and continue burning and moving the fire until the bed is burned over. Never burn when the land is wet. It will require from one and a half to two hours to cook the soil properly.

Or, better still: Rake over nicely the plat to be burned, then place down poles from two to four inches in diameter, three and a half to four feet apart, over the entire surface to be burned. Then place brush thickly over the plat and weight down with wood, over which throw leaves, trash or other combustible material; over this sprinkle kerosene oil, and set the whole on fire and burn at one operation.

But any mode of burning the plat will suffice, provided that it is effectually done. After the plat has been burned and has cooled, rake off the large coals and brands, but let the ashes remain, as they are essentially a first-class manure. Then coultter over the plat deeply, or break with grub hoes, and make fine the soil by repeated chopping and raking, observing not to bring the subsoil to the surface, and remove all roots and tufts. Manure from the stable, hog pen or poultry house, or some reliable commercial fertilizer (I use the "ANCHOR BRAND") should be chopped into and thoroughly incorporated with the soil while preparing the bed to be sown. Experience has demonstrated that it is better to use both. But beware of using manure containing grass seed. The judgment of the

planter must guide him in the amount of fertilizing material to be applied at this stage ; but it were well to remind him that the tobacco plant rarely responds to homœopathic doses of plant food, but that the allopathic usage suits it best.

Sow at the rate of a tablespoonful of seed, which is about half an ounce, on every fifty square yards at first sowing, and later resow with a heaping teaspoonful over the same surface, to secure a good stand. Injury by frosts or bugs may require a third or fourth sowing. Sow a little thick rather than too thin to meet contingencies, and secure a good stand in time.

The best way to sow the seed is to mix them thoroughly with a fertilizer or dry ashes, and sow once regularly over the bed, reserving seed enough to cross sow to promote regularity. The tobacco seed is the smallest of all farm seeds, and consequently requires a light covering. If the seed are sown before the 20th of February, the best way is to firm the surface of the bed by treading it over closely, but if sown later, sweep lightly over with a brush or light rake. Then run surface drains through the bed, with inclination enough to pass off the water. To do this properly, run them off four or five feet apart with the foot, then open with a narrow grubbing-hoe to the depth of three or four inches. Then trench deeply around the outside of the bed, to ward off surface water and prevent washing.

MULCHING AND COVERING.—Hog hair whipped fine and scattered over the bed, attracts and retains moisture, protects the plants from frost, and acts as a manure. There is no better covering for a plant-bed, but unfortunately it is rarely ever in full supply. Fine brush should be placed thickly over the bed, or if not handy, cover with straw or chaff free from grain. A covering of some such material is necessary, or the young plants are likely to be killed by frost or suffer from drought, and they thrive better with some protection.

A covering of thin cloth has been found to hasten the growth of plants and protect them from freezing and injury by the flea-bug. The bed is surrounded by boards tacked up close, to the height of eighteen to twenty-four inches, according to the size of the bed ; then a covering of thin canvas is made, the size of the bed, and tacked to the upper edge of the boards all around. This excludes cold air and fleas, makes the bed warmer, and acts as a cold frame, the canvas taking the place of glass.

Horner & Hyde, of Baltimore, Md., prepare a cloth for plant-beds by a process which greatly promotes durability, while rendering the cloth unfit for domestic use, and therefore not liable to be stolen. It is a good thing, as the writer knows from trial

The canvas should not touch the bed, but be kept suspended above, by ropes stretched across underneath, and firmly fastened, to prevent sagging.

A STANDING PLANT-BED.—Every planter ought to have a standing plant-bed, which may be secured in the following way : Sometime in July or August select one of the best of the old plant beds, and with hoes shave down the green plants over its entire surface, and cover over thickly with straw or leaves, then place green brush thickly over the bed and weight down with wood. When the whole is dry, some time in the late fall or early winter, set on fire, and thus re-burn over the bed. Then chop and

rake fine, sow and trench as when first prepared. Repeat the same operation every year, and, if the bed is manured properly, it will improve and prove a stand-by for many years.

UNBURNED BEDS.—Plants may be raised by going into the forest, selecting a moist rich plat, and after raking off the leaves, coultering or chopping the surface fine, manuring heavily, and sowing the seed. But such beds rarely hold out well if the season be dry. They never "repeat" well after the first "drawing" like burnt beds, which are more reliable for a successive supply of plants as the season advances.

TIME OF SOWING SEED.—The time for sowing varies with the latitude, variety and season. Between the parallels of 35 and 40 degrees north latitude, compassing the great tobacco belt, beds may be sown any time between the 1st of January and 20th of March, and the sooner the better for the bright grades, which ought to be planted early to mature, ripen and yellow, preparatory to being cured early in the fall, when the most successful curings are usually made. Yellow tobacco ought to be planted out in May, but June plantings usually do best in heavy dark grades. The planter will consult his interest by sowing at a proper time to suit the grade he desires to raise.

Plants set out after the 10th of July rarely pay for growing and handling, and if not planted by that time, it will be wise to plant the hills in peas, potatoes, or something else.

HASTENING THE GROWTH OF PLANTS.—As soon as the plants become "square," *i. e.*, have four leaves, you may begin to force their growth, if necessary. Nothing is better at this stage of their growth than to apply dry stable manure, rubbed fine, and sowed over the bed—applying at the rate of five bushels to every one hundred square yards. Be sure to have it dry and fine, and apply when the plants are dry. This is a favorable time to apply a good fertilizer, and the best time to apply it is during a shower, or when it is apparent that one is impending.

LOOK OUT FOR THE "FLEA-BUG."—If the "fly," as it is called, begins to devour the young plants, apply plaster, in which rags saturated with kerosene oil have lain for a few hours, covering the plants with the plaster, if necessary, to keep the little pests from devouring them. Repeat the application after every rain, unless the flies have left.

A covering of green cedar brush has driven off the fly when other remedies failed, and saved the plants. If the flies are numerous, the planter can save his plants only by vigilant and constant attention. Hard burning, early and thick sowing, liberal and frequent applications of manure, are the best safeguards, which rarely fail to reward the planter with an early and full supply of stocky plants, and with some left for his less provident neighbors. Some planters, if such they may be called, always fail—some never. Follow the latter, and you will always be right.

Selection of Soil, Preparation and Manuring.

The tobacco plant thrives best in a deep, mellow, loamy soil, rich or made so with manures. The subsoil ought to be sufficiently porous to permit the water falling on the surface to pass downward readily, and not to accumulate to drown and stagnate.

If old land is selected, it ought to be fallowed deep in the fall or early

winter, that the frosts may pulverize it. Turn under, if possible, some coarse farm manure, for its decay will greatly help to loosen the soil, while furnishing pabulum for the crop. As a coarse manure for yellow tobacco, nothing is better than wheat straw turned under in the fall and winter. The plants rarely fail to ripen yellow in color on land thus treated.

In the early spring more manure may be applied, but it is better that this should come from the compost heap. Follow the application of the compost with one-horse turning ploughs, *crossing* the previous ploughing, turning not exceeding four or five inches deep—about half the depth of the first ploughing. Then, just before it is time to plant, run double shovel ploughs over the lot, *crossing* the previous furrows, and follow with harrow or drag, *crossing* again to thoroughly make fine. These repeated ploughings, *crossing each time every previous one*, never fail, if the work is done when the land is in proper condition, to put it in proper tilth.

Let the planter remember that “a good preparation is half cultivation,” and not stop until the land is in proper condition.

If any one knows of a better way, then let him pursue it—the writer knows of none better. And just here it may be well to state, that perfection is not claimed for any mode or practice recommended in this book, but only the best methods known to the author are given, for guidance to the uninitiated. We live and learn, but life is too short to learn every good thing by experience unaided. Every man owes something to those who are to come after him; to freely give as he has freely received.

But the author is not writing for those who know more than he does—and doubtless there are very many—but for beginners, and those having but little experience in tobacco culture. He gives no advice which he has not followed in his own work, and recommends nothing which experience has not commended as the best in theory tested by practice. Those who possess a better knowledge of the subject, and whose practice is verified by results, ought by all means to give the public the benefit of their knowledge and experience. Planters will gladly welcome their teaching, and honor them for their service.

But, to return. Having put the land in nice “order,” lay off the rows with a shovel plough, three feet three inches apart, and follow, drilling along the furrow some reliable, tried fertilizer at the rate of some one hundred and fifty to three hundred pounds per acre, according to the natural strength of the soil and the quantity of manure previously applied. Then follow with one-horse turning ploughs, lapping four furrows on the fertilized trench, and when finished in this manner your lot is ready to be planted, when the beds have been “patted” with hoes, with “pats” two feet ten inches apart; to mark points for setting the plants.

New ground, or old field that has grown up and been cut down, will require different preparation from old smooth land. But on the former our best brights are raised. Any preparation that will put the soil in fine condition, clear of roots, tufts and trash, is all that is required. Experience teaches, that if land is cut down two or three years previous to its being prepared for tobacco, it greatly facilitates the preparation and helps its fertility. Much of the vegetable material, both in and upon the soil rots, the roots break easily, and the soil is altogether lighter and finer.

While it is economy to dispense with the hand-hoe in making hills on old land—the plough doing all the work, as it ought, when it can be well done—yet on stumpy, rooty and rough land, the hoe is indispensable in the preparation of a hill, as it should be made to receive the plant. But before the hills are made, it may be well, unless the soil is naturally rich, and such is not often the case with soils best adapted to yellow tobacco, to apply some fertilizing material to hasten forward the plants, and mature them properly and early. Here commercial fertilizers have done, and are doing, their best work. Bulky, coarse manures often do more harm than good on new and puffy soils. The smaller the bulk, and the more concentrated the fertilizing elements, the more readily they are appropriated and assimilated by the plants, if of the right material, and in the most available form. Nitrogen, phosphoric acid, potash, lime and soda, are most necessary for the tobacco plant; and a fertilizer, which supplies the relative quantity of each, and from the proper sources, will never fail to show good effects therefrom, if the rainfall is sufficient to quicken their action.

There are several brands of fertilizers manufactured especially for tobacco, differing in composition, price and merit; and after repeated experiments with most, if not all, of the best, the author gives it as his decided opinion, that for *fine, bright, silky tobacco*, nothing equals the “ANCHOR BRAND” Tobacco Fertilizer, prepared by the Southern Fertilizing Company, Richmond, Va. And this opinion is based upon nineteen years’ trial, and often in competition with the best of other brands on the market. It is a *tried and proved* fertilizer, which the planter can use without the risk of getting something unsuited to his crop, and therefore, we can recommend it with confidence. A good article of any grade of tobacco requires *high farming*. Bear this in mind, and act accordingly.

MODE OF APPLYING FERTILIZERS.—Planters differ in the manner of applying fertilizers, whether in the hill, drill or broadcast. That the same quantity will go further and produce larger results the first year, for the quantity used when applied in the hill or drill, is generally conceded. But advocates for broadcasting claim that when the crop, to which the fertilizer is applied, is to be followed by another in quick succession—to be sown in wheat as soon as the tobacco is removed—then broadcasting is best, for reasons which seem too apparent to need explanation.

Having prepared the land for hilling, apply the fertilizer by whichever mode the planter prefers, and in such quantity as the natural strength of the soil indicates, laying off the rows three feet three inches apart, and make the hills about two feet ten inches distant from centre to centre. Mark the measure on the hoe-handle, and require the hillers to apply it frequently as a guide. The rows should be wider apart than the hills, to afford proper cultivation without breaking and bruising the plants at the final ploughing—a matter of no small importance, as the least blemish on a fine leaf nearly destroys its value as a wrapper.

PLANTING.—Having prepared the hills, you are ready to plant any time after the first of May. Planting is often most effectually done when the hills are being made in May, and the land is moist with the winter’s sap, by planting in the afternoon the hills made the same day. If properly planted, very few of the plants will fail to live. Observe to draw the plants one by one from the bed, and handle so as not to bruise them. It

is a waste of time and plants to set out very small plants, but wait until they are of proper size—the largest leaves about two and a half to three inches wide. Put a basket of plants in the hands of a boy or girl, who drops a plant on each hill, dropping in one or two rows, according to age or expertness. The men follow, with each a planting peg made of hard wood, six inches long, one and a quarter inch in diameter at large end, and tapering to a point. Each planter takes a “hand plant” to start with (unless the dropper has learned to drop two plants on the first hill), and pushing his planting peg some two inches into the hill, withdraws the peg, inserts the plant, and by a dexterous movement of the peg and the knuckles of the left hand, closes the dirt gently but compactly around the roots. He then picks up the plant on the hill as he moves forward and by the time he reaches the next hill has adjusted the plant in his hand to insert into the hole in the next hill. Thus the “hand plant” facilitates the work. Try it, and you will be convinced. There is art in planting properly, as is shown in the increased number of living monuments that attest superior work. But why enter into such minute details? say some. That you may start right, shun the errors of inexperience, and practice at the start the best methods, as demonstrated by successful practice.

If the soil is dry when the hills are made, then it will require a “season” for planting. The best come with showers. It is not well to plant soon after a soaking rain, but wait until the land settles. If the plants are good, seasons favorable, and the planting well done, very few will die if transplanted before the 10th of July. After that time all is uncertainty. Hence the importance of getting a stand before that time.

After planting over, it will be necessary to replant from time to time as seasons occur, embracing every opportunity to fill up the missing hills. If cut worms are troublesome, hunt for and destroy every one as far as possible; for it is useless to put a plant in a hill where one of these pests has taken up quarters, and expect it to live and grow.

CULTIVATING.—It is important to commence cultivation soon after planting, to loosen the soil and start the plants growing. Just at this point many planters fail to do their duty, which no subsequent work can atone for. Early, rapid and thorough cultivation is necessary to produce first class goods. If the preparation has been thorough, thrice ploughing, followed each time with a hand hoe, will suffice for the crop.

For the first ploughing, no implement is better than the wing coultter, the next best the cultivator. The second ploughing may be effectually done with the turning plough or cultivator; if grassy, use the first. The last ploughing is most effectually done with three furrows with the single shovel—a furrow on each side, then splitting the middle with the third and last furrow.

Never “scrape down” tobacco with the hoe without putting back on hill or bed as much dirt as is scraped down. This will prevent baking, and save many plants should a dry spell follow the hand-hoe working.

Any process which stirs the soil effectually and often and keeps the plants free from grass and weeds, will constitute good cultivation, no matter how or with what implement done. Old land will require more work in cultivation than new, and dark grades more than bright. Short singletrees should be used after the plants are half grown, to prevent tearing and breaking the leaves.

The yellow grades should be cleared of grass and weeds before the first of August, and not ploughed thereafter; but the hoes may be used at any time to clear out the crop till the leaves commence graining. The longer tobacco is ploughed the later the plants will be in ripening; therefore, the importance of giving early and thorough cultivation. Any one who can raise good cabbage ought to know how to cultivate tobacco, as the cultivation is very similar.

Priming and Topping.

Under this head there is a wide difference of opinion. Breaking off the small and inferior leaves of the plant near the ground is called "priming," which operation is done along with the "topping," if done at all. There are advantages for and against priming, but all resort to topping—plucking out the seed bud and adjacent small leaves with the thumb and finger. Some contend that pulling off the lower leaves saps the plants and retards growth, if the weather is dry. That permitting the lower leaves to remain on the stalk protects the upper ones from sand and grit, makes them cleaner and therefore more saleable. Sand and grit are the terror of the tobacco buyer. On the other hand, it is contended by some that by pulling off the lower leaves, which are generally useless, the remaining leaves receive more nutriment and contain more wax, oil and gum, and that the lower leaves harbor worms and make the worming process more tedious.

It is best to wait until a considerable number of plants begin to button for seed before commencing to top. Topping should be the work of experienced and trusty hands—men who can top, leaving any required number of leaves on a plant without counting. The secret of this—no longer a secret to the initiated—is, that the topper soon learns to know that counting the bottom leaf and the leaf that hangs over it in the third tier going upward, make *nine* leaves, including both top and bottom leaves. Fixing this in his mind, the topper has only to add to or deduct from this *index leaf* marking *nine*, to leave any desired number of *leaves* on each plant with certainty and without counting. Young man, if you don't know how, get some old negro to show you. Topping, you will find, is a slow business if you have to count the leaves on all the plants topped. If the plants are not "primed," then the "bottom" leaf must be fixed by the eye, looking upward for the leaf in the third tier, which hangs over it, to catch the cue as before. If priming is done, don't err in pulling off too many leaves. No regular rule can be given, so the planter must judge for himself. The reason given for waiting until many plants are ready to be topped is mainly that more plants may ripen together and be ready for the knife at the same time. This is an advantage that applies with strong force to all tobacco intended for flue curing.

The number of leaves to be left on each plant varies according to the time the work is done, early or late, the appearance and prospective development of the plant, the season, whether propitious or unfavorable, strength of the soil, and amount of fertilizing material applied. On medium soils, in ordinary seasons, the first topping should be from ten to thirteen leaves—rarely more—for brights. For sweet fillers from nine to ten, and for dark, rich shipping, from eight to nine leaves are enough.

As the season advances reduce the number of leaves accordingly ; remembering that quality more than quantity regulates returns.

Worming and Suckering.

Many devices have been resorted to in order to lessen the number and mitigate the ravages of the horn-worm, but the lack of general and continued efforts from year to year has brought only partial relief. Some years they come in great numbers, and despite the best efforts of the planter, seriously damage his crop. Perhaps the next year they are few, and give him no trouble. It is the nature of this insect to raise at least two broods during the year. The hawk-moth or tobacco-fly usually makes its appearance in Virginia in the month of May. The eggs deposited by the first moths hatch out in from five to seven days larvæ or worms. The worm sheds its outer skin twice before it gets its growth. The growing stage of the worm lasts from twenty-five to thirty days, and after it has attained its growth it gorges itself a few days longer, and then crawls or burrows into the ground, where it soon passes into the pupa state ; and after some twenty-three or twenty-five days from the time of its crawling into the ground the pupa sends forth a moth to lay more eggs and hatch out more worms. Each moth is capable of laying on an average two hundred eggs. So that for every moth in May we may reasonably expect at least one hundred worms of the first brood ; and if none of these are destroyed, but all allowed to change to moths, and these latter to raise a horde of worms, what wonder that the second brood sometime appears in such countless numbers as to defy all efforts to destroy them before they have ruined the crop. Every moth ought to be destroyed as they appear ; and this may be done to great extent by injecting a few drops of sweetened Cobalt (which is a poison) into the flowers of the Petunia, Honey-Suckle or Jamestown (Jimpson) weed, which will give them their final quietus. But this hunt for the moth is not general, and if it were some would escape. But if every planter would wage a war of extermination on the *first brood* of worms—unfortunately a thing rarely done—they would never appear in such unconquerable hordes later in the season. The suckers should be pulled off every week as they appear, and ought never to be permitted to get over two inches long ; for if permitted to grow large they abstract much that would otherwise go to perfect a rich, silky leaf. No planter need expect a crop of fine grade who does not pull off the suckers while small, and prevent the horn-worms from riddling the leaves.

Cutting and Housing.

Do not be in a hurry to begin cutting your tobacco until it is ripe, and enough fully and uniformly ripe to fill a barn. A thin butcher or shoe knife, well sharpened, and wrapped with a soft cloth around the handle and extending an inch along the blade, will do the work effectually and be easy to the hand. Try it. Put knives into the hands of experienced cutters only—men who know ripe tobacco, and will select plants uniform in color and texture, and will cut no other. Have your sticks all ready in the field, and placed in piles convenient—sticking a stick vertically in the

ground over each pile that they may be more easily found when wanted. Pine sticks, rived three-fourths of an inch by one and one-fourth inch, and four and one-half feet long, drawn smooth, are best.

Start together two cutters and one stick holder—the cutters carrying two rows each and the stick-holder walking between them. The cutter takes hold of the plant with his left hand at the top near where the knife enters the stalk ; with his right he splits the stalk down the centre (observing to guide the knife so as not to sever the leaves) to within three inches of the point he intends to sever the stalk from the hill ; and as the knife descends his left hand follows the slit or opening, and when the plant is severed from the hill, by a dexterous movement of the left hand the plant is straddled across the stick in the hands of the holder. When the stick has received about six medium plants, if intended for brights, it is ready to go to the barn, either carried by hand if near, or hauled on a wagon if distant. If it is necessary to use the wagon, prepare a bed sixteen feet long to hold three coops on piles, on which place tobacco as cut, and after placing twenty-five or thirty sticks of cut tobacco on each coop, drive to the barn to be unloaded.

Tobacco suitable for brights is best handled in this way, as it is bruised less than if handled by any other mode. Fry it, planters, and *know* for yourselves. Very heavy tobacco will break less if, after being cut by the above mode, the sticks are placed gently on the ground and the plants allowed to wilt before being removed to the barn. But tobacco of medium size bruises less to handle it without wilting. Cutting and housing by this mode you never have any sun-burned tobacco. For brights, it has been found best to commence curing at once, as soon as the barn can be filled.

“ Sun-Cured Tobacco ”

Just here it may be well to give our practice in sun-curing. If the crop is too rich and coarse for brights, then it may be good policy to cure it sweet. To do this properly, erect scaffolds at or near the barns, on which place the tobacco as soon as cut. But some, in order to obviate the hauling of heavy green tobacco, place the scaffolds in or near the tobacco field. But it is never safe to scaffold tobacco away from the barn ; for after the leaf is partially dry it ought never to be caught out in the rain ; which may happen if the tobacco is placed on scaffolds away from the barn. When rain threatens, that on scaffolds near the barn may very soon be placed out of danger, but not so that on scaffolds afar off.

But flue-cured fillers command nearly or quite as much as sun-cured, and the risk is much less.

To cure fillers with flues, let the tobacco be placed in the barn as soon as cut, and raise the heat in the barn to eighty-five or ninety degrees Fahrenheit, and then go about other business. Kindle fires in the flues every morning, raising the heat to ninety degrees, and then leave as before, and continue to do this for four or five days until the tobacco is thoroughly yellowed. If the tobacco has much sap, it may be necessary to continue the yellowing process from five to seven days to yellow properly. When the leaves have assumed a mottled, piebald appearance, run the heat to one hundred degrees and let it remain at that point for three

or four hours. Then raise the heat two and a half degrees an hour until one hundred and thirty is reached. Keep the heat at this point until the leaf is cured, and then move up gradually to one hundred and seventy or one hundred and eighty, and thus cure stalk and stem. If cured properly, there will be much of the leaf *mahogany*, while the remainder will run from a bright dapple to a cherry red.

“Shipping Tobacco.”

Dark heavy shipping, and nothing which does not possess size and substance is fit for this grade, may be cured with flues better than in any other way. Smoke from the open wood fire is objectionable, and with the flue you get the heat, which is all that is wanted, without the smoke. Curing with open wood fires belongs to the past, and none but the old Bourbons will continue the old practice, because they know no better. Taste and fashion are against smoke, and nothing else is needed to banish the old and recommend the new mode. If a dark color is desired, which is not so fashionable as formerly, it can be secured as easily over flues as over wood fires. But the world wants colory tobacco, and this can be produced certainly better with the flue than in any other way. Besides, by the flue the leaf is cured sweet and free from smoke or soot.

A skilful curer can produce the colors most in demand, and by the flue better, and with more certainty, than in any other way. The main object of the author is to induce planters, who have never used flues, to try them for all grades.

Curing “Bright Yellow Tobacco.”

There are two modes for curing yellow tobacco—one with charcoal and the other with flues. The first is the primitive mode, but is fast giving place to the latter, which is cheaper and more efficient, and is being adopted by most of our best planters. The chief agent in either mode is heat—a dry, curing heat—to expel the sap from the leaves, stems and stalks of the plants, and catch the color, *yellow*, next to Nature’s color, green, and to *fix* it indelibly. This is the *science* of curing *yellow* tobacco. There are seven prismatic colors—that of green tobacco occupying the middle of the prism. By the process of nature, leaves in drying descend in color from green, first to yellow, then orange, then red, and finally lose all color as they go to decay. Now, a quick dry heat, so regulated as to dry out the leaf and catch the yellow, and fix it, is the *modus operandi* of curing fancy bright tobacco.

A barn containing seven hundred sticks of green tobacco, six medium plants on each stick, holds along with the tobacco four thousand five hundred to five thousand pounds of water, which must be expelled in from eighty-five to one hundred hours.

Charcoal produces an open, dry heat, well suited for the purpose ; but its preparation is costly, its use tedious, dirty and laborious and it deposits a black dust on the leaf that is objectionable. With flues (see diagram) constructed with furnace and pipes, the wood is burned as cut in the forest or old field, and the whole process of curing is less costly and less

laborious, and the tobacco cured therewith free from dust, and has a sweeter flavor. The flue process possesses so many advantages over all other modes of curing tobacco, is so safe, if properly constructed, and free from smoke, that when its merits become better known, it will come into general use and supersede all other modes.

The first step in curing is called the STEAMING OR YELLOWING process. Medium tobacco will require from twenty four to thirty hours steaming at about ninety degrees to yellow sufficiently; but tobacco with more or less sap, larger or smaller, will require a longer or shorter time to yellow. Here the judgment of the curer must be his guide. Inexperienced planters would do well to procure the services of an expert curer, if they have tobacco suitable for fine yellow. The planter saves in enhanced value of his crop many times the money paid to the curer, and besides, by close attention, he may learn in one season to cure well himself. Theory alone, however good, and directions, however minute, will not do here, but it is *practice* that must qualify one to cure well.

When it is remembered that no two plants are exactly alike, no two barns precisely similar in every particular and that the weather may change every hour, is it reasonable that a fixed programme can be followed for every curing with any reasonable hope of success? The experienced know better. On work so variable, only general directions can be given.

The next step is called FIXING THE COLOR. When the tobacco is sufficiently yellowed, best leaves of a uniform yellow, and the greener ones of a light pea-green color, it is time to advance the heat to one hundred degrees; observing the leaves closely to detect sweating, which will soon redden and spoil the color, unless driven off. To do this, open the door and let it stand open, and if, after an hour or more, the sweat has not disappeared, open a space between the logs on opposite sides of the barn to let in more air, and permit it to remain open until the tobacco has dried off all appearance of the sweat. Right at this point more curings are spoiled than at any other stage of the process. It may be well to remember what is a fact, that at least five curings are spoiled by proceeding too *fast*, to one failure from going too *slow*. Now stick a pin here.

But to go back to the barn where we have just dried the leaf, and where the thermometer indicates a fall of five or ten degrees—but this need not concern the curer to put him out of hope, for a little cooling under the circumstances was necessary—we close up the opening and raise the heat to one hundred degrees. But a skilful curer detects the first indications of sweat, and prevents it by regulating the heat.

Keep the heat at one hundred degrees for four hours, and then advance two and half degrees every two hours, until one hundred and ten degrees are reached. Here you have reached the most critical point in the difficult process of curing bright tobacco. The condition and appearance of the tobacco must now be the curer's guide. No one can successfully cure tobacco until he can distinguish the effects of too much or too little heat in the appearance of the leaf. Too little heat, in fixing the color, operates to stain the *face side* of the leaf a dull brown color, and is called "sponging," and may be known to the novice by its appearance only on the *face side* of the leaf. Too much heat reddens the leaf, first around

the edge and then in spots, which are visible on *both sides*. Now, to prevent sponging on the one hand and spotting on the other, is the aim of the experienced curer. No definite time can be laid down to run from one hundred and ten to one hundred and twenty degrees. Sometimes four hours will suffice, then again eight hours is fast enough. While it is usual at this stage to advance about five degrees every two hours for medium tobacco, the condition of the tobacco often indicates, to the practised eye, the necessity for slower or faster movement. But it is safe not to advance above one hundred and ten degrees until the tails begin to curl up at the ends. Arrived at one hundred and twenty or one hundred and twenty-five degrees, this is the *CURING* process. The heat should remain at or near these figures until the leaf is cured, which will require from six to eight hours, according to the amount of sap in the leaf to be expelled. When the leaf appears to be cured, advance five degrees every hour up to one hundred and seventy degrees and remain until stalk and stem are thoroughly cured. To run above one hundred and eighty degrees is to endanger scorching the tobacco, and perhaps burning both barn and tobacco.

To recapitulate:

First. Yellowing process,	90 degrees, from 24 to 30 hours.
Second. Fixing Color,	100 degrees, 4 hours.
“ “ “	100 to 110, 2½ degrees every 2 hours.
“ “ “	110 to 120, 4 to 8 hours.
Third. Curing the leaf,	120 or 125, 6 to 8 hours.

Fourth. Curing stalk and stem, 125 to 170, 5 degrees an hour. And continue at one hundred and seventy degrees until stalk and stem are thoroughly killed and dry, which usually requires from twelve to fifteen hours.

The New Method.

The curing process for yellow tobacco, as heretofore laid down, was first published in the year 1871, and was the first systematic treatise given to the public on the difficult art of curing yellow tobacco; and it has remained substantially unaltered through six editions of the pamphlet, aggregating largely over 100,000 copies. Thousands in several States have taken it for their guide and been enabled to learn to cure successfully, without any other assistance. But the yellow tobacco industry has greatly progressed and extended during the past decade, and new light has come through experience to further perfect the art of curing.

The following is given as the latest improvements in curing tobacco:

House the tobacco as soon as cut, and after warming up the barn for two or three hours, at a temperature of about 90 degrees, advance the heat rapidly up to 125 degrees—or as high as it will bear without scalding the tobacco—letting the heat remain at 125 degrees only a few minutes, and then, by drawing the fires and turning the dampers, cut off the heat and let the temperature of the barn descend to 90 degrees.

This is generally called “sapping.” The *rationale* of the process is this: The heat, by expansion, opens the sap cells and starts the water to the surface, facilitates evaporation and hastens the yellowing process.

This “limbering up” process, of high heat at the start, must be of *short* duration, or else great injury will be done to the tobacco.

Following this mode, the yellowing process is greatly shortened, requiring from four to eight hours less to yellow sufficiently, and also hastens the second stage of curing—fixing the color.

It is well to state that there is so great a difference in the character of tobacco grown in different localities, that no rule can be given for the yellowing process, applicable to all. The tobacco of middle and western North Carolina, will yellow in much less time than that grown in middle Virginia. Then again, tobacco will bear higher temperature in the yellowing process during some years than in others. Notably the season of 1884, was so dry and tobacco held so little sap when ripe, that many commenced yellowing at 100 degrees, and had the leaf cured in 50 hours. But this is exceptional, and for general practice would spoil both color and tobacco.

The season, therefore, it must be borne in mind, greatly determines the amount of heat the tobacco will require to be yellowed and cured.

Some of the patented flues are so constructed that the heat is easily controlled, and the tobacco smoked or steamed, or both, as may be necessary in the yellowing stage. Some tobacco will require neither to yellow right, while some other will dry up green or red without yellowing, if smoke or steam be not used to assist the yellowing process. Smoke and steam will facilitate the yellowing of thin poor tobacco, holding very little sap. Wetting the barn floor from time to time will assist in yellowing tobacco. Then there is an occasional barn of tobacco that defies all the known modes and appliances to yellow or cure bright.

But for all practical purposes, whenever the curer has mastered a knowledge of the effects of too much or too little heat, as evidenced in the color of the tobacco, clearly described heretofore, he possesses a key to solve the difficult problem in the science of curing tobacco. By close observation this lesson may soon be learned and then success is easy.

After curing, as soon as the tobacco is sufficiently soft to move, you may run it up in the roof of the barn and crowd it close, or if the barn is needed for other curings, the tobacco may be carried to the storage barn or bulked down in any dry house on the premises. But be sure that nothing is bulked with green stalks or swelled stems, for if such are placed down in bulk it will be sure to heat and utterly ruin.

Ordering.

If, after the tobacco is cured, the weather remains dry and it fails to get soft readily, so that it can be moved, it may be brought in order in the following way: Place green bushes with the leaves on over the floor and sprinkle water over them copiously; if the tobacco is very dry and the atmosphere contains but little moisture, and if the weather is cool, a little fire kindled in the flues will assist in making the tobacco soft. Straw wet, or made so, will answer the same purpose. If the weather is damp, there will be no necessity to use either straw, brush or water. But when it is necessary to use any means to order tobacco, it is best to apply them in the afternoon, that the tobacco may be removed the next morning.

If the weather continues warm and damp or rainy, tobacco that remains hanging will be apt to change color, unless dried out by flues or charcoal.

When this becomes necessary, build small fires at first, and raise the heat gradually.

Stripping.

Tobacco should never be stripped from the stalks except in pliable order, and the leaves on every plant should be carefully assorted, and every grade tied up separately. Usually there will be three grades of leaf, assorted with reference to color and size, and two of lugs. Of leaf tie six to eight leaves in a bundle, and of lugs eight to ten. As fast as you strip, either hang the "hands" on sticks—twenty-five to each stick—and hang up or bulk down in two layers, the heads of hands or bundles facing outward. The latter mode is best, if you intend to sell in winter order *loose*, on the warehouse floors. If bulked down, watch frequently to see that it does not heat. If the bulk becomes warm it must be broken up, aired and rebulked, or hung up if too soft. It is safer always to hang up as soon as stripped, unless you design to sell soon, and strike down in "safe-keeping order" in spring or summer. It is considered in "safe order" when the leaf is pliable, and the stem will crack half-way down from the tie.

Packing.

If you sell loose, deliver in large uniform piles—such will cost less, and your tobacco bring more in price. But to sell in a distant market, pack in tierces—half-hogsheads make the best and cheapest—to weigh about four hundred pounds net, taking care not to press the tobacco so as to bruise it, or pack it too closely together. The best leaf is wanted for wrappers, and it must open easily when shaken in the hand. Pack one grade only in each tierce, uniform in color and length; but if it becomes necessary to put more than one grade in a tierce, place strips of paper or straw between to mark and separate them. Pack honestly, for honesty is always the best policy. The man who "nests" his tobacco will certainly go on the "Black List," and buyers have good memories.

If your tobacco is *fine, sound, and nicely handled*, you'll have the satisfaction of getting, at the least, a remunerating price for it, although poor and nondescript stock may be selling for less than the cost of production. The world outside of this country makes, as a rule, low grades plenty, and at a cost to raise much less than we can compass. We must plant less surface, manure heavier, and cultivate and manage better if we would get the best prices.

The following extracts, taken from the *Border Review*, published in Granville county, North Carolina, where some of the finest brights in the world are produced, are here given, that the reader may select a programme to suit his judgment and preference:

The Tobacco Curing Process, Recorded at the Barn Door.

Building eighteen feet square, four firing tiers, fitted up with sheet-iron pipe flues, manufactured by R. G. Wyatt, Henderson, N. C.

No. 1, filled with about four hundred and fifty sticks of tobacco grown on old field, fertilized with "ANCHOR BRAND," at the rate of two hundred pounds per acre. Bright yellow on the hill. Leaf large, but light and thin, due to imperfect cultivation.

Started fires, and ran up to ninety degrees in six hours; then to one hundred in six more; then to one hundred and ten in six—yellow leaf at end of eighteen hours. Then up to one hundred and twenty in six hours; to one hundred and twenty five in six; to one hundred and thirty in six; then to one hundred and forty in three hours, and remained at that temperature six hours—leaf now about cured; then to one hundred and fifty in three hours, and remained there three hours; then to one hundred and seventy-five in twelve hours, and continued there twelve hours. A perfect cure in seventy-two hours, and bright lemon color.

No. 2 is a building of the same size, fitted up with the same kinds of flues, manufactured by Allen & Co., Henderson, N. C. Barn filled with same number of sticks of tobacco, grown on same land, but some larger, and thicker leaf.

Started fires, and ran up to ninety-five degrees in eight hours; then to one hundred in six hours; then to one hundred and ten in ten hours—leaf yellow; then to one hundred and twenty in eight hours; to one hundred and thirty in six; to one hundred and forty in six, and remaining from one hundred and forty to one hundred and fifty in eighteen hours; then to one hundred and seventy-five in six hours, and continued there about twelve hours. Stalk, stem and leaf, fully cured at the expiration of eighty hours. Leaf bright lemon color. Success.

The difference in the time of curing was due to the size of tobacco. The flues of both manufactures are equally efficient, and require a very small quantity of wood.

An opening, ten inches wide, is left at the top, whole length of barn, and closed after the leaf is cured. This removes all danger of "sweating."

THE HESTER PROCESS.

Start fires, and go to ninety or one hundred, and stand twenty-four to thirty hours; then to one hundred and ten in five or six hours, and stand till the desired color is obtained; then go up five degrees every two and a half hours till one hundred and thirty is reached, and stand till leaf is cured, usually from eighteen to twenty-four hours; then five degrees every two hours till one hundred and eighty is reached, and standing three hours, drop to one hundred and sixty or one hundred and seventy, and stand till stalk is cured. Whole time about ninety six hours. The process of Mr. Samuel Collis is about the same as above.

If you have not a large stock of patience and perseverance, with a will to learn, and a resolution to keep trying until you succeed, you have missed your calling, and had better try something else; for there is no royal road to success in bright tobacco raising. But if you possess the true essentials—have the true and lasting *pluck*—you will succeed, soon or late, and, what is better, reap a full reward for honest, faithful toil.

And now a parting word. No farmer, who wishes to thrive, should depend upon one crop to keep him going. Unless he raises on his place the food needed by his family and his stock, he stands in fearful jeopardy: for if his one crop (which is to pay for everything) fails, he and his are bound to suffer. The drought of 1881 taught us very fully that painful lesson. If in the tobacco country, and he makes tobacco his money crop (raising at the same time his own food supplies), he will be able to *pay cash for his fertilizer*, and thus secure the large discount that men are always ready to make for the cash down. "Time-sales" eat like the canker-worm. He will likewise be ready to deal justly by his labor, and to provide with comfort to his purse for the necessities that cannot be produced on his place, not the least among which is some good agricultural periodical. In this latter he will find a never-failing source of pleasure and instruction for self, wife and children.

NOTE BY THE COMPANY.—We know of no man to whom the tobacco planter is more indebted than to Major RAGLAND. To his instructions how to grow and cure the crop is the great advance that has been made in the production of fine yellow tobacco especially due. The inquiries made of him, for seed of the best varieties, became so numerous and persistent, that he was compelled to make tobacco seed-growing part of his regular business; and that there might be no question about their reliability, he selects not only the finest plants of each particular variety for seed, but clips off all the blossoms except the crown-shoot, thereby throwing the whole strength of the plant there. Inasmuch as inquiries for seed also continually come to us, and that these inquiries may be answered all at once, we have asked the Major for a copy of his catalogue, to insert in this document, and here it is:

SEASON 1884-5.

PIONEER TOBACCO SEED-FARM,

THE BEST VARIETIES

FOR EVERY TYPE OF TOBACCO.

PEDIGREE SEEDS, improved by continuous selection, and grown on the crown shoots only, warranted true to name, and of the highest vitality. It is essential to select a variety suited to the type desired to be produced, then order at once, and sow early.

We offer none but seeds of our own production. None better can be found than the following:

TUCKAHOE.—A first class variety in every respect. New and preferable to most of the older varieties for possessing more body. Leaf long, and extra fine—the perfection of a wrapper. Price, 30 cents per ounce.

WHITE-STEM ORONOKO.—From the Yellow Oronoko, which it resembles, and a most excellent variety. Greatly preferred in some localities where the finest types are grown. Per ounce, 30 cents

GOLD LEAF.—One of the newest and best of the brights. Cures orange, rather than lemon color, and makes a first class cutter, wrapper or filler.

SILKY PRYOR.—Resembles the Yellow Pryor. Leaf rather small, but texture silkier.

MAYO.—Like Sweet Oronoko, from which it sprang. Leaf broader and finer. Makes a filler and mahogany wrapper that cannot be surpassed.

HYCO.—A new variety, and the easiest of all cured yellow. Fine

texture, good flavor, and sells well. A Hybrid Oronoko and Gourd Leaf. A beautiful and desirable variety.

HESTER.—A new variety, originated in Granville county, N. C., and has no superior for the yellow type. It has size, shape, texture and color, and ripens early. It recommends itself greatly in this, that it has greater adaptability over a wider range of soils than any other of the yellow varieties, and may on this score be considered the surest.

YELLOW ORONOKO.—A reliable old yellow variety, grown for more than forty years, and improved with reference to the production of yellow stock.

GOOCH.—A new variety of great excellence. Resembles the Yellow Oronoko, but has a larger leaf—a splendid manufacturing sort.

YELLOW PRYOR.—Preferred by many for brights, and succeeds where other yellow sorts fail. The West is giving it preference.

SWEET ORONOKO.—Used for first class plug fillers, and makes when sun-cured the best Natural Chewing Leaf. A favorite for the “Home-spun” wherever known.

FLANAGAN.—Originated in Henry county, Va., and is greatly used for making sweet fillers and mahogany wrappers. It is a variety of the Old Sweet Oronoko.

BIG ORONOKO.—An old variety, and a good tried one. Has a large, broad, finely-shaped leaf, and for strips and dark wrappers has no equal.

BLUE PRYOR.—A favorite rich, dark shipping variety.

MEDLEY PRYOR.—Originated in Halifax county, Va., about seventy years ago, and is a general favorite with planters who grow the English and Continental grades. When properly grown and cured, it commands the highest price for a “shipper.”

GLESSNER.—A new cigar variety from Pennsylvania. Large and fine.

CUBAN SEED LEAF.—A Hybrid Havana and Seed Leaf. Grows large, of fine texture and delightful flavor.

The Cuban Seed Leaf and Glessner are well suited to our Virginia climate and soils, and have no superior for cigars.

We defy competition in the selection, quality and price of our seeds.

Retail price by mail, 25 cents per ounce, five ounces for \$1, except where otherwise stated. Special wholesale rates to the trade on application.

R. L. RAGLAND, *Hyco, Halifax County, Va.*

In support of Major RAGLAND's statement, in connection with the “ANCHOR BRAND,” it gives us great pleasure to present (in the following) the report of the Major's manager, Mr. EDWARD F. COLE :

“HYCO, VA., January 19, 1885.

“To the Southern Fertilizing Co., Richmond, Va.:

“DEAR SIRS,—Major RAGLAND has referred to me, for answer, your letter requesting to know how the ‘ANCHOR BRAND’ Tobacco Fertilizer behaved on his crop the past year.

"We used on our crop of tobacco—52 acres—last year, four different brands of fertilizers, one of which was the 'ANCHOR BRAND.' The several fertilizers were used on contiguous ground, all through the crop in the several fields, and all staked off to designate each, so as to compare and determine the merits of each one used.

"At one stage of growth two of the brands used gave promise of out-stripping the 'ANCHOR'; but the latter beat all on the 'home stretch,' and made the *richest, heaviest and best* tobacco in the crop.

"That part of the crop fertilized with the 'ANCHOR' did not burn so much at bottom, during the drought, as that fertilized with the other three brands.

"During the six years that I have managed for Major RAGLAND, we have always applied, every year, other brands in competition with the 'ANCHOR BRAND,' but that article has invariably proved to be the *best of all*.

"Yours respectfully,

"EDWARD F. COLE,

"*Manager for Major R. L. Ragland.*"

Testimony in Confirmation

Of Major Ragland's Judgment on the "Anchor Brand" Tobacco Fertilizer, from the Chief Markets in the Tobacco Region.

It must be a source of great gratification to Major RAGLAND to know that the opinion held by him, in the matter of the special excellence of the "ANCHOR BRAND," as an appropriate food for the tobacco plant, is fully confirmed at every point in Virginia and North Carolina where tobacco is largely handled, as the statements presented below will amply testify. This standard and long-tried article continues to receive, from year to year, the commendation alike of grower and warehouseman, and with the accomplishment of such a result it is not seen how any farmer could get his consent to take the risk of failure by investing in anything else. He wants his crop *to mature in good time, not to fire in dry weather, to cure up well and uniformly, and to be fine in color, weight, and texture*. All this is secured by the use of the "ANCHOR BRAND," not one year, but year after year. But let those who are best able to speak state what they have to say, and here it is:

DANVILLE.—Messrs. PACE BROTHERS, while proprietors of the "Star Warehouse," Danville, Va., made this report:

"From our experience in the tobacco business, having been in close contact with the planters of this fine tobacco section for the past six years, we find that

the *finest tobacco* is made by planters who use the 'ANCHOR BRAND' Tobacco Fertilizer (known in old times as 'Gilham's') and we do not hesitate, upon the facts given by the leading, most successful, and reliable planters of our acquaintance, to recommend this fertilizer as the best and cheapest, *because it is the best and most reliable fertilizer on the market.*"

The testimony above is confirmed by a note just received from Mr. ED. M. PACE, of that firm, and now of "Pace's Warehouse," Danville:

"For more than fifteen years I have mingled with the tobacco planters, around their fire-sides, throughout the whole region of country trading at Danville, and I have yet to hear the first complaint made of the 'Anchor Brand,' and nowhere has more of it been used than in this region. On the contrary, they say it pushes the plant in the beds, and feeds it when set clear through to maturity, making a leaf of fine quality."

Gen. H. H. HURT, of the "Eagle Warehouse," Danville, reports:

"I have watched with much gratification the continued success of the 'Anchor Brand' Tobacco Fertilizer for the last ten years, both while I did business in Halifax county and since I have resided here, and believe it to be equal to any fertilizer that I have ever known in ordinary seasons, *and for a dry season, it surpasses all other fertilizers that I have come in contact with.* For the past two years I have been engaged in selling leaf tobacco, and from what I can gather from farmers who have used the 'Anchor Brand,' I am convinced that it is one of the most reliable and best fertilizers ever manufactured, for the production of the fine yellow tobacco peculiar to this section of our State and North Carolina."

Mr. R. A. ARRINGTON, of Danville, has been handling the "Anchor Brand" largely for many years, and has this to say about it:

"I have refused to sell any other fertilizer for tobacco but the 'Anchor Brand,' because, whether the seasons be wet or dry, my customers report satisfactory results from it. I want to do more than merely sell a fertilizer; the man who uses it ought to be able to pay for it and have money left to buy the other goods I keep in store; and those who get the 'Anchor Brand' from me do this very thing. They are all better off by its use, and they could not be if the tobacco they raised didn't bring a good price. I don't think a better commendation of the value of this article could be given than the increased prosperity of those who use it."

LYNCHBURG.—MESSRS. LEE, TAYLOR & SNEAD, of Lynchburg, are among the heaviest handlers of leaf tobacco in the Southern country, and furnish the "Anchor Brand" to their customers, who are found all through Southwestern Virginia, East Tennessee and Western North Carolina. This is their report:

"We have never had a complaint of the 'Anchor Brand' since we have been handling it, and our experience with it covers many years. The farmers say it is the very thing for 'Brights,' and that it matures the crop always in good time. It is our judgment, familiar as we have been for years with the trade in leaf to-

bacco, that it is not desirable to push the plant too rapidly and bring it to maturity too early. The best tobacco we handle is that which runs its full age in growth of from 95 to 110 days. Stimulating too much depreciates materially the quality and lessens the width of leaf. We don't know of a better answer to the inquiry about the *color*, *weight* and *texture* of the tobacco raised by the 'Anchor Brand,' than to give some of the prices we have gotten on the crops produced by it now being marketed. These figures represent the average price per hundred :

17,233 pounds averaging.....	\$ 75 46 per 100 lbs.
52,369 " "	57 06 " " "
12,036 " "	54 35 " " "
23,110 " "	44 32 " " "
62,921 " "	40 37 " " "
49,524 " "	35 74 " " "
61,028 " "	29 33 " " "
69,920 " "	23 05 " " "
448,211 " "	39 64 " " "

DURHAM.—The "Anchor Brand" began its career at Durham coincident with that of Mr. BLACKWELL, who established the famous "Durham Bull" brand of smoking tobacco. Mr. HENRY A. REAMS had charge of the first tobacco warehouse there, and sold the "Anchor Brand" to his customers. Here is the report he made after he had seen the results of ten years from the use of the "Anchor Brand":

"I do not hesitate to say that my books will show more pounds of tobacco sold at fancy prices, and more specially high averages, raised by the 'Anchor Brand' Tobacco Fertilizer, than by all other brands beside. The better the tobacco the better my commissions for selling it, and knowing from my long experience as a tobacco salesman, what most universally gives the best tobacco, I want my friends to use that article. The tobacco raised by the 'Anchor Brand' is uniform in size, regular in color, and of the finest texture."

Mr. JOHN L. MARKHAM, who now sells the "Anchor Brand" at Durham, confirms the good opinion expressed by Mr. REAMS, and adds: "This fertilizer has always been noted for making a fine smooth yellow tobacco on the hill. It matures the crop in good time, and the tobacco does not scab so badly in wet weather, nor fire so much in dry weather, as where other fertilizers are used. I have never heard a complaint of the "Anchor Brand."

WINSTON.—The sale of the "Anchor Brand" began at Winston before a tobacco warehouse or tobacco factory had any existence there. Messrs. ROBERT GRAY & SONS handled it. Out of the tobacco grown by its use came the market now existing there, and it is a very large one. Major J. T. BROWN early opened a warehouse for tobacco, and gave the following as his estimate of the "Anchor Brand":

"While farming I preferred the 'Anchor Brand' Tobacco Fertilizer to all other preparations for the tobacco crop. I regard it as one of the safest and surest investments a farmer can make; in fact, both experience and observation confirm the opinion held by our best tobacco growers that this fertilizer is without a successful competitor in the production of fine tobacco. In few words, the very best tobacco sold at this warehouse, year in and year out, is made by the use of the 'Anchor Brand.'"

Messrs. PFOHL & STOCKTON, of Winston, succeeded Messrs. ROBERT GRAY & SONS in the sale of the "Anchor Brand." Their trade in it extends from Forsythe into Surry, Stokes, Guilford, Yadkin, Davidson, Davie and Iredell counties. They report as follows:

"We have handled the 'Anchor Brand' very largely for many years, and have heard the judgments of both grower and buyer on the merits of the tobacco produced by it. The testimony has been uniformly in its favor as the best application known for the production of fine, heavy, silky, yellow tobacco. The country trading at this market embraces a very large area, and consequently a considerable diversity of soils, and yet this article is found to do satisfactory work, no matter where used in our territory."

BRISTOL.—The great increase in the production of tobacco in the country trading at Bristol, has made that point a good leaf market. Its location brings growers from Virginia, Tennessee and North Carolina. Messrs. J. H. WINSTON & SON, of "Winston's Tobacco Warehouse," Bristol, have handled the "Anchor Brand" from the beginning there, and are consequently perfectly familiar with its action. Here is what they report:

"The Anchor Brand Tobacco Fertilizer has given better satisfaction than any other article ever offered here for the tobacco crop. Other fertilizers will make tobacco grow, just as ashes make it grow, rank and coarse and green. The Anchor Brand makes it grow, too, but at the same time it gives a leaf of exquisite color and texture. Our customers tell us that it is the very thing for fine, bright, silky tobacco; that it pushes the plant forward as fast as is desirable, maturing it in full time; that tobacco, if rushed too rapidly, has a thin leaf with poor texture, whereas the Anchor Brand gives a tough, substantial leaf; that is, it feeds the plant regularly from the beginning to the end. We can't give better testimony to the excellence of this article than to report the fact that the tobacco we sell that brings the highest averages is made by the Anchor Brand. Our sales of this article show a larger figure each year, and everything points to specially heavy sales the coming season. A man is certainly not wise who will pass by what time has shown to always do good work, and allow himself to be persuaded to take what may lose him his crop. We sold a few days ago four crops (all made by Anchor Brand customers), and they met every requisite desired in a smoker and wrapper, *toughness, body, elasticity* and a *splendid color*. An old Lynchburg buyer present said he had never seen anything as handsome."

ASHEVILLE.—The yellow tobacco raised in the region around Asheville is specially fine for cigarette purposes, and that market is growing with great rapidity. The soils, however, are diverse, thus permitting the cultivation of several distinct types of tobacco, and so that point, in the future, will not be confined to one type, but be rather a market where all sorts of buyers can be accommodated. Asheville has now both tobacco warehouses and factories, and a very large trade in the "Anchor Brand." Messrs. PENNIMAN & CO., there have arranged to supply all their friends with it in the region from Old Fort to the Tennessee line, including Cocke county, Tennessee, and the country along both branches of the Western North Carolina Railroad. They report great satisfaction with it by their customers, as witness the following examples:

BARNARD, MADISON COUNTY, N. C., Sept. 26, 1884.

Messrs. Penniman & Co., Asheville, N. C.:

GENTLEMEN,—I used on my crop this year ten sacks of *Anchor Brand Tobacco Fertilizer*, and forty sacks of other kinds, being ——— and ———. I entered my tobacco at the Western North Carolina Fair at Asheville, and selected exclusively from that on which I used the Anchor, it being so much superior to the other tobacco. It gives me pleasure to report the following results, viz: I received \$50, first premium, on fine wrappers; \$30, first premium, on fine smokers; \$20, first premium, on fine cutters; and, in addition, \$20 and a diploma for the finest display of leaf tobacco from any one farm.

Yours, truly,

C. A. NICHOLS.

In submitting a sample of tobacco, a few days ago, Messrs. Penniman & Co. made the following statement about it: "We induced Mr. Luther, a friend of ours, to take a single acre and put it in tobacco, using the Anchor Brand, and taking care to itemize the result. He had never cultivated tobacco before; but the outcome, which we present in the following, shows what intelligent management, aided by this fertilizer, can accomplish:

<i>Dr.</i> —To use of 1 acre (measured) of land.....	\$ 3 50
" 1½ sacks of Anchor Brand.....	7 20
" cost of cultivating and curing the crop.....	35 90
	<hr/>
	\$ 46 60
<i>Cr.</i> —By 752 lbs. of tobacco, netting.....	190 00
Net profit on the acre.....	\$143 40
	<hr/>

"Not having any experience, he had to employ a man to cure the

crop, which made an expense that he would not otherwise have had to incur. We will here mention a few other instances :

"As to the WEIGHT of the tobacco grown by the Anchor Brand, one of our customers had a man on his place who worked for a share of the crop. This man was to have the contents of a barn, which, with all the sticks in place, had never turned out, before the use of the Anchor Brand, over 400 lbs. of tobacco. The man, wanting some money in advance of time to market the crop, asked his employer to take his tobacco to account at the prevailing price, and settle on the basis of 400 lbs. This was done, but when the tobacco, raised by the Anchor Brand, was taken down for market. it was found to weigh 490 lbs !—an increase of nearly 25 per cent. That certainly is a conclusive demonstration of the ability of the Anchor Brand to give *weight* to tobacco.

"Another one of the "ANCHOR BRAND" customers, on the crop he sold last April, got \$2,600 for the product of six acres of land.

"Mr. T. B. STALLCUP, of Swain county, used Anchor Brand, and two other brands on his tobacco last season, and reports that he greatly prefers the 'Anchor.' It gave his tobacco a better *body* and *color*, and made a much *heavier, gummier* leaf. From the acre, on which he used the 'Anchor,' he got 764 lbs. of tobacco, which sold for \$259.75, or 34 cents average. He says he will use nothing but the 'Anchor' on the crop planted this Spring."

"Mr. G. W. REED, of Riceville, informs us that he had fully *100 pounds more weight* to the barn, with the 'Anchor,' than the folks in his neighborhood, who insisted on using other fertilizers, had in barns of the same size."

REIDSVILLE.—The "Anchor Brand" has been at Reidsville ever since it became a tobacco market. Messrs. MATHEWS & WILLIAMSON, who handle it there, are thoroughly informed about its action, and made this report on it :

"From our own personal experience—and it covers a long time—in watching the results from the use of the various brands of commercial fertilizers handled in this section, it is our mature judgment that the 'Anchor Brand' stands at the head of all for the production of FINE SILKY YELLOW TOBACCO. The plant seems to receive more fitting nourishment from the use of this article than from any other, and we are of opinion that if our farmers made it their stand-by we would hear less of light, chaffy tobacco, having some color but no body, and that the farmer would realize the result he ought to enjoy from his labor ; for low grade tobacco *will not* bring big money."

In a late communication from them they add :

"The Anchor Brand continues to give the same good satisfaction. The best farmers tell us that they prefer a fertilizer that will not spend too much of its force in the beginning, but rather one that will hold out to the end, so that the crop can be well cured, and a leaf made of *body* as well as *color*."

GREENSBORO.—This point is a comparatively new tobacco market, but it has a good range and is bound to go forward. The "Anchor Brand" was generally used, and Messrs. W. E. BEVILL & Co., of "Bevill's Tobacco Warehouse," who handle it, report that their customers, despite the unfavorable season, showed little complaint with its action, and that "the tobacco made from its use has a *better body* and *weighs more* than that produced by the use of any other fertilizer."

HENDERSON AND OXFORD.—These points, like all the other markets in the yellow tobacco country, are the happy results of the information (Major Ragland's "Instructions How to Grow and Cure Fine Yellow Tobacco,") disseminated by the Southern Fertilizing Company. The "Anchor Brand" has been largely in the region trading at those points for eighteen years, and ranks among its customers the best growers there. The LYON family, near Dutchville, have had remarkable success with it, reaching figures for their crops that were supposed to be unattainable. Mr. A. G. FLEMING, in the same range, a famous locality for the production of fine yellow tobacco of the best quality, received at the State Agricultural Fair of North Carolina, in 1882, the premium of \$50 on fine yellow tobacco. Mr. Fleming used the "Anchor Brand," and says in a letter to the Company that he can safely and readily confirm the high estimate Major Ragland holds of the excellence and reliability of the "Anchor Brand" for the production of *fine, silky, yellow tobacco*. Mr. DAVID YARBROUGH, of Person county, took the first premium at the North Carolina State Fair, Raleigh, in 1881, on fine yellow wrappers, and these wrappers were raised by the use of the "Anchor Brand." Messrs. PARKER & CLOSS, who handle the "Anchor Brand" at Henderson, write that it continues to give the same good satisfaction. Also, Mr. J. A. WEBB, who handles the "Anchor Brand" at Oxford.

HICKORY.—We cannot do better, in connection with this market, than give the language of Mr. R. B. DAVIS, who resides in the region (Catawba county) trading at Hickory, in his "*Manual of Tobacco Culture*":

"As the planter can ill afford to run a risk in this matter, I can with confidence recommend to him the Anchor Brand Tobacco Fertilizer, manufactured by the Southern Fertilizing Company, Richmond, Va., and which is a specific prepara-

tion for tobacco, and was formerly known as 'Gilham's Tobacco Fertilizer,' having been first prepared by the formula of the late Col. William Gilham, of the Virginia Military Institute. I have used it from the beginning, and it has uniformly maintained its original standard."

SALISBURY.—The two tobacco warehouses at Salisbury are making good headway, and, with the fine country around that point, its position as a tobacco market is assured. Mr. J. D. GASKILL, who sells the "Anchor Brand" there, writes that his customers, as far as he has been able to confer with them, say that "the 'Anchor Brand' gives them better satisfaction than anything they have ever tried on tobacco."

STATESVILLE.—Statesville is a fine tobacco market, and the energy of her business men will make it a better one. The "Anchor Brand" has been there for many years, and our representatives there, Messrs. RAMSEY & MAXWELL, report the same general satisfaction with it that exists at Winston and the other points in their region.

SOUTH BOSTON.—This point has become a very extensive tobacco market, and drains a large area of country. Like Durham and Winston, it has grown with remarkable rapidity, but its prosperity is none the less solid for that. The types sold there meet all shades of demand; and in no region has the "Anchor Brand" been more largely used. Messrs. J. W. EASLEY & Co., have been handling it at South Boston, and report: "When the soil is suited to the type, the 'Anchor Brand' grows tobacco of the *finest quality*. It acts admirably, both as to starting the crop and feeding it through to maturity." Mr. T. A. WATKINS, at Turbeville, in the same range, reports: "My customers are well pleased with the work of the "Anchor Brand" last year. With seasons at all favorable, none of them have encountered any trouble in making fine crops with it." Mr. T. W. LEIGH, in the same range, reports: "I have always thought, and continue to think, that the 'Anchor Brand' is without any superior and few equals in the market, and this judgment is confirmed by my customers." Messrs. TORIAN & Co., of Midway, in the same range, report: "The 'Anchor Brand' behaved well for our customers." Mr. R. T. EDWARDS, of Mountain Road, in the same range, reports: "My crop of 175,000 hills had no rain after the 11th of July, yet in all of my early plantings with the 'Anchor Brand,' I have both *size* and *color*. 400 pounds to the acre is the average quantity used by the best farmers."

ROANOKE.—This point has always been a good tobacco market, and has large plug factories. Messrs. P. L. TERRY & Co., who handle the "Anchor Brand" there, report: "All of our customers pronounce the

Anchor Brand to be 'O. K.' for fine tobacco; no one has ever complained of it. It gives the crop early maturity, and a leaf of excellent quality."

ABINGDON.—This is a comparatively new tobacco market, but it boasts several warehouses and a number of factories. Messrs. F. B. HURT & Co., who sell the "Anchor Brand" there, only confirm the testimony from all the other fine tobacco points, when they say that it is preferred above all other fertilizers by their customers.

MARTINSVILLE.—The growth of this market, both in tobacco warehouses and factories, is remarkable. The "Anchor Brand" enjoys a fine trade there, and is held in high esteem. The "Anchor Brand" is no less commended by the growers of the fine sun-cured leaf peculiar to the "Leatherwood Valley," in the same county (Henry).

THE YELLOW TOBACCO OF WEST VIRGINIA.—The area devoted to this crop in West Virginia has been increasing from year to year. Several years ago it was found to be impossible to secure good prices for this growth, the leaf being so chaffy. Mr. SILAS SHELBURNE, of Richmond, Va., who handles nearly all of the yellow tobacco grown in West Virginia, informed his friends there that unless they abandoned the fertilizer they were using, and adopted the "ANCHOR BRAND," they must not hold him responsible for the low prices their crops would bring. He recommended, in order that his judgment might be tested, that they try the "Anchor Brand" on one-half of their crops, putting the fertilizer they had been using on the other half; then cure and pack separately the leaf produced by each, and let the market (both being sold the same day) determine which was the better. The result was so universally in favor of the "Anchor Brand," that he has orders now for nothing else from that quarter. Mr. Shelburne assures us that for *beautiful color*, *BODY*, and *texture*, the "Anchor Brand" excels all other fertilizers ever made for yellow tobacco, and his experience covers many years and a large range of country.

SHIPPING TOBACCO.—Last year showed most trying seasons on tobacco of this type. The "Régie" buyers are, in consequence, put to great straits to find leaf sufficient to fill their contracts. Still, such leaf was produced, and by the "Anchor Brand." Take an instance. Mess. J. T. ISBELL, SON & Co., of Cartersville, Cumberland county, Virginia, are not only large growers but very heavy buyers of leaf. The senior member of the firm called on us a few days ago and stated that they grew the finest crop of "shipping" produced in the county last year, using only the "Anchor Brand" on it; that in going on their rounds, buying,

they carried along a sample of this crop, for the sake of comparison, and finding those who used other fertilizers did not have anything at all to equal it, could give them no other comfort than to tell them that, had the "Anchor Brand" been used, the tobacco would have brought a very much better price.

SUN-CURED TOBACCO.—There is no region where more satisfactory results have been gotten from the "Anchor Brand" than in the home, in particular, of the "sweet-sun-cured" tobacco (Caroline and Louisa counties, Virginia). In Caroline, such fine growers as, Dr. J. A. Flippo, Mr. Littleton Flippo, Mr. L. B. Goodloe, Mr. Joseph B. Flippo and Mr. Manassah Campbell; and in Louisa, Mr. Joseph M. Baker and the customers of Mr. H. M. Daniel, at the Court House, can bear testimony to the excellence of the "Anchor Brand." They have told us about the extreme sweetness of the flavor and of the leathery character of the leaf, (the very perfection of quality for fine plug stock), in the tobacco raised by the "Anchor Brand."

The flood of testimony, furnished by the foregoing, establishes all that could be desired by the Company manufacturing the "ANCHOR BRAND;" and it is to them a source of peculiar pleasure that their customers are satisfied that they have gotten exactly what they bargained for, namely: A HIGHLY CONCENTRATED FERTILIZER ABLE TO PRODUCE TOBACCO OF THE FINEST QUALITY. That is what the Company started out to do, and the proof here presented shows that it has been splendidly accomplished.

Information Received by the Southern Fertilizing Company Bearing upon the Volume of the Tobacco Crop that ought to be Planted this Year in the Range Covered by their Trade.

To become as fully acquainted as possible with the tobacco situation, as it affects the region covered by our trade, we have conferred with gentlemen largely interested in handling all the types our people produce, and give below the substance of their statements:

FINE YELLOW TOBACCO.—The domestic demand, in particular, for this tobacco is such that the area at present devoted to this type is not great enough to supply it. We see, therefore, from year to year, no abatement in the prices of this variety of leaf, *if of fine quality*; on the contrary, a steady advance. The cigarette makers, perhaps, never had a year as prosperous as 1884, and there is nothing to indicate that the year 1885 will not be equal to it. But the demand is not

confined to cigarette leaf, but covers the whole range in which yellow tobacco is employed. Again, there is nothing to fear from the competition of yellow tobacco produced in other countries. We have the fullest advices from what we conceive to be the best posted tobacco house in London on all the points involved in the situation. Their communication is dated 3d January, instant. Referring to the outside yellow growths, they say: "Chinese tobacco is used here chiefly in the manufacture of cheap, light mixtures for the pipe, and rarely, if ever, for cigarettes, as it burns badly and has a nasty flavor." Again: "The production of cigarette tobacco by the Turkish Empire continues normal, and but little of it comes to England, the bulk of the fine being taken for home consumption, and by Russia, where but little is grown." It is a fact that the Sultan of Turkey smokes cigarettes made in Richmond, Va., and prefers them to anything produced in his own empire. So, the point with every man having the soils and seed fitted for this type (and this he must see specially to), and the appliances necessary to cure it properly, is authorized to do his *very best* this year for a crop of the *finest quality*. Don't be satisfied with a low grade; it won't pay.

SUN-CURED ("MAHOGANY") TOBACCO.—This growth, peculiar to certain spots in the tobacco region (notably in Caroline, Louisa, Mecklenburg and Henry counties, Virginia, and Granville county, North Carolina), and so much prized for the best grades of plug tobacco, has been commanding very high prices for some months past, and those best able to judge say that the demand existing for it is now too constant to induce a belief that any decline in price will come about this year.

SHIPPING TOBACCOS.—Here we allow our London friends to again speak; for there they are specially in their element:

"There is a general want of tobacco all over the world, and prices rule high. Two or three large crops of American, in succession, are wanted, so that there may be a sufficient supply in hand for a couple of years, should the growing crop fail, and manufacturers not be obliged to depend just upon the chance of the year's crop. Another reason is that it is vastly better for the tobacco to be old, and manufacturers not to be compelled to use it as soon as sampled. At present we have only about 3,000 hogsheads over a year's consumption of "Western Strips," and more than half that is in the hands of a few rich manufacturers, who will have old tobacco, and of the remainder a large portion will either be too common or heavy for our use here, so that virtually our manufacturers are going on from hand to mouth, and when the sampling of the previous year's crop takes place here they have

to buy for immediate use. In Virginia there is no surplus at all, and fine bright export tobacco is not to be had. We have had buyers from various parts of the Continent and from Australia here, but have not been able to supply them. From a grower's point of view this may be all very well, as although he limits his acreage of tobacco he gets a full price, but what is satisfactory to him is just the opposite to many others. Manufacturers cannot afford more than a certain price, and if one particular growth goes beyond them they find something else to take its place. Java and Japan are very good examples of this. If Java is dear, then Japan comes in, and *vice versa*, and this has been going on for years." This letter we submitted to one of the oldest and most judicious buyers of export tobaccos on the Tobacco Exchange in Richmond, when he returned it with the following memorandum: "As to the tobacco outlook here, much will depend upon the prospects of a new crop, here and in the West, later on, but I should think that planters have every inducement to aim at a full crop, especially of dark tobacco, which now is lamentably scarce, consequent upon the peculiar weather of the latter part of last summer. Colory and bright grades are also quite desirable, as the world at large is becoming more and more partial to color, but then the European markets will only compete for them to a small extent, unless prices should decline considerably, as your London friends say."

It is not hard, from this survey, to tell the planters what they are justified in doing, in connection with the crop about to be pitched. So, looking at any type produced in this immediate latitude (Virginia, West Virginia, North Carolina and Tennessee), and we find that the promise of a paying return to the planter, on the result of the coming crop, *if of fine quality*, is all that could be desired.

JOHN OTT, Secretary,
Southern Fertilizing Company, Richmond, Va.

P. S.—It will be observed that no effort is made by this Company to push its business on any other basis than that of *the merits alone of the Goods it offers*. Hence, where our friends have used other articles by the side of the "ANCHOR BRAND," the names of those articles are not given, no matter how badly we have beaten them in the field. The world is large enough to give us all a living, if we strive faithfully to deserve it, and in this, as in all things else, *the best should win*.

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