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**Descriptions and Classification of Varieties
of American Upland Cotton**

By

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DESCRIPTIONS AND CLASSIFICATION OF VARIETIES OF AMERICAN UPLAND COTTON.

BY J. F. DUGGAR, *Director.*

REASONS FOR DESCRIBING AND CLASSIFYING VARIETIES.

The objects in view when this work was undertaken by the writer in 1899 were the following:

- (1) To determine what qualities accompany large yield of lint, so that farmers might be able to choose more intelligently the best of existing varieties according to their qualities.
- (2) To ascertain what characters are correlated, so as to lay a firmer foundation for rational schemes of breeding better varieties of cotton.
- (3) To obtain a better understanding of the meaning of variety tests made by the southern experiment stations, by ascertaining what *qualities*, rather than what *proper names*, have usually been associated with high yield under variable conditions of soil and climate.
- (4) To protect cotton farmers against the payment of exorbitant prices for seed of so-called new varieties in cases where the "novelty" was the same as some well-known old variety, seed of which could be obtained at a reasonable price.

The investigation is by no means completed and is being continued, especially to determine what characteristics may be combined in one plant and what qualities are antagonistic. The results of the first year's work in describing and classifying varieties was published in 1899 as Bulletin No. 107 of the Alabama Experiment Station. The present publication includes investigation of varieties made at Auburn, Alabama, in 1899, 1902, 1903, 1904, 1905, and 1906. During each of those years collections numbering 60 to 100 so-called varieties were grown, so that the data here published usually represent the average results of tests of the same variety extending through several years. Some of the recently introduced varieties, however, have been tested only one year.

BASIS OF THIS CLASSIFICATION OF VARIETIES.

The cotton plant is very unstable, changing easily in many of its characters according to the climate and soil where it is grown. This tendency to vary with its surroundings is especially strong as regards the form of the plant, the length of the lint, and the size of the crop. Even the percentage of lint in the seed cotton varies some-

what from year to year. Moreover, the pollen may be carried from one variety to another by insects, thus producing hybrids from which still further variations arise. Because of these and other natural causes, it is to be expected that there should be numerous agricultural varieties of cotton differing from each other in slight and not very permanent qualities or characters.

Hence any attempt to classify agricultural varieties of cotton is more or less unsatisfactory. The gradations between varieties in any one agricultural character, for example, in size of boll, are so slight and gradual that positive identification of a single plant is practically impossible. However, it is believed that the averages,—for example, the average size of boll of a number of typical plants within one variety, taken in connection with the average of other qualities,—may be made the basis of a system of classification, which, though not infallible, will be useful. The classification here proposed is based, as far as considered practicable, on *groups* of qualities, rather than on a single character. Unfortunately the characteristics that are important to the farmer are those that vary most widely with change of environment.

The tentative scheme of classification here presented is practically the same as that published by the writer in 1899, in Bulletin No. 107 of the Alabama Experiment Station. A new group has been added to include chiefly varieties intermediate between the semi-cluster and any other group.

UNIFORMITY NEEDED WITHIN A VARIETY.

Man has done quite as much as nature to increase the confusion as to the varieties of American upland cotton. The chief difficulty that has been encountered in the attempt to describe and classify cottons grown at Auburn under several hundred different names has been the absence of uniformity among the plants of a single variety. While this variability is partly due to natural agencies, it is also largely due to the failure of growers to avoid the mechanical admixture of the seed of other varieties, which so easily occurs at public gins. Worse still, in the case of many, perhaps most, of the so-called varieties, there has been no long period of selection through successive years with a view to fixing a uniform type.

A cotton ought to have a considerable degree of uniformity between the plants composing it before it is entitled to a name. If it is a selection from an old variety it may have this uniformity from the beginning, provided that undesirable qualities are cast out by careful selection. If the new cotton is a natural or artificial hybrid, or a mechanical mixture of two varieties, it will require at least several years of rigorous selection to secure any approach towards uniformity. Until this uniformity is secured it is neither just to the public nor advantageous of the exploiter to bestow a variety name.

It cannot be too strongly urged upon those who would originate new varieties of cotton that in selecting plants for seed they should select for the same quality or qualities every year. Stick to your ideal

year after year. If you find plants that are strong in some other quality than that you have heretofore had in mind, but different from the plants selected in previous years, either discard them or propagate them as a separate strain in a different field. Secure uniformity and special merit; until this is attained do not inflict the public with a new name and additional confusion and financial loss.

The confusion among varieties is still further increased by the re-naming of old varieties, innocently or for self interest, sometimes intentionally by growers or seedsmen, sometimes by one's neighbors. This practice cannot be too severely condemned, however innocently it is sometimes done. It is to be hoped that public sentiment will hold every exploiter of a new variety morally and financially responsible that what he sells at an advanced price under a new name shall be something more than a new name.

In the long run there is more profit to the grower in the legitimate business of selecting and selling improved seed of a good and well known variety under its true name than in selling it under a new name. Here right and self-interest are on the same side.

GROUPS OF VARIETIES.

The short staple or upland varieties of cotton may conveniently be divided into seven classes, and to these may be added the long staple upland varieties as an eighth. I would propose for each of these general classes a name, giving, when practicable, an idea of the manner of growth of the plant, and with each class name would associate the name of some distinct and well known variety as a type or standard. I shall designate these groups as—

- (1) Cluster varieties, or Dickson type.
- (2) Semi-cluster varieties, or Peerless type.
- (3) Rio Grande varieties, or Peterkin type.
- (4) The King-like varieties, or King type.
- (5) Big Boll varieties, or Truitt types.
- (6) Long Limb varieties, or Petit Gulf type.
- (7) Intermediate varieties, or varying types.
- (8) Long Staple Upland varieties, or Allen type.

The lines of demarkation between these groups are not always clear and distinct; one group often merges into another by almost imperceptible gradations, just as is the case with related varieties.

Below is given a list of the varieties which are included under these several groupings, and also a general description of the varieties composing each class. Some varieties are not classified, either because of insufficient data, or more frequently because badly mixed. In cases of a medium degree of impurity, or variation, description has been made of the predominant type.

GROUP I.—CLUSTER VARIETIES, OR DICKSON TYPE.

The most striking characters are (1) the extreme shortness of the fruit limbs, and (2) the tendency of the bolls to grow in clusters,

often two and even three from the same node. The plants are often tall and always slender and normally erect, though often bent down by the weight of bolls growing near the upper end of the main stem. The few base limbs are often long, or there may be no wood limbs, especially when these varieties are closely crowded or grown on poor land. The bolls and seed are usually small, but may be of medium size;—the seed are thickly covered with fuzz, which is usually whitish, with little or no brownish or greenish tinge.

As to the time of maturity these varieties must be classed as early, even though they sometimes make a second growth of bolls in the top of the plant which may fail to mature. In earliness they are surpassed by the varieties of the King type (Class IV.)

In per centage of lint they are variable, some of them equalling in this respect the Rio Grande group.

Dickson, Jackson, (also called Limbless or African), U. S. Dept. Agr. No. 128, and Welborn, belong to this group. (See illustrations.)

GROUP II.—SEMI-CLUSTER VARIETIES, OR PEERLESS TYPE.

These varieties have in less marked degree some of the qualities which distinguish Class I, being erect and having bolls borne singly very near together. Along the main stem are short fruit limbs increasing in length towards the bottom of the stem. The two to five base or wood limbs are usually of medium length. In size of bolls and size of seed and percentage of lint there is considerable diversity among these varieties. The seed are usually well covered with fuzz of many shades, whitish, greenish, or brownish. Most of these varieties are early or medium, but some that belong in both the semi-cluster and big boll groups are late in maturing. The following varieties are included in the semi-cluster group: Barnett, Berryhill, Blue Ribbon (L. S.), Cummings, Defiance, Dongola (B. B.), Featherstone, Garrard, Haralson (B. B.), Hardin, Hawkins, Herndon, Hilliard, Lealand, McCall, Minor, Montclare (B. B.), Norris, Peerless, Pullnot, Rogers (B. B.), Sterling, Tyler, and Woodfin.

GROUP III.—RIO GRANDE VARIETIES, OR PETERKIN TYPE.

The characters which most distinctly mark this class are:

(1) The large proportion of lint, usually 35 per cent. or more, of the weight of seed cotton, and

(2) Seeds of which many are bare of fuzz, except at the tip end, or so scantily covered with fuzz that the dark seed coat shows through.

The plants are well branched, and usually, on upland soil, of medium size. On many plants the stems and branches are of a deep red color. The bolls are small to medium and the seed are quite small. In time of maturing these varieties are usually neither very early nor extremely late.

The varieties included in this group are conveniently divided into two sub-groups according to the presence or absence of naked, smooth

seed. The following Rio Grande varieties have a considerable proportion of naked seed: Anson Cream, Bates, Braddy, Brannon, Cameron, Carolina Queen, Champion, Combination, Crossland, Dixie Wilt-Resistant, Gayosa(?), Mattis(?), Moss, Parker, Peterkin, Pinkerton, Ptomey, Shine Black Seed, Sistrunk, Texas Oak, Texas Wood, Victor, and Wise.

Rio Grande varieties having practically no naked seed, but having many seed so scantily clothed with fuzz that the dark seed coat shows through, giving a brown color, are the following:

Berryhill, Borden, Dearing, (probably) Eureka, Excelsior (?), Favorite, (probably) Gregg, Layton, Park's Own, Speight, and (probably) Toole.

GROUP IV.—KING-LIKE VARIETIES, OR KING TYPE.

The varieties of this group are the earliest of American cottons. The plants are usually small but may be of medium size. The limbs are numerous and the fruit limbs are rather long in proportion to the height of plant. The fruit limbs are often crooked at the joints, reminding one of the crooked twigs of a black jack oak (*Quercus Marylandica*). The base limbs are short and sometimes replaced by fruit limbs bearing a number of bolls on each. King is essentially a short jointed, compact plant with an abundance of slender, rather crooked limbs. The bolls of this group are small; the seed are usually small and thickly covered with fuzz which is usually brownish, with an occasional seed showing a greenish tint. The percentage of lint is usually 33 to 35, and sometimes higher. King and its synonyms have on many blooms a red spot near the base of the inner portion of each petal. The varieties of this group are: Dozier, Grier, Golddust, Hodge, King, Lowry, Mascot, Missionary, and probably Shine Early.

GROUP V. BIG BOLL VARIETIES OR TRUITT TYPES.

The character which especially distinguishes this class is the large size of bolls, of which only 45 to 68 are required to yield a pound of seed cotton. Other specially notable qualities are late maturity and vigorous growth of stalk. The seed are large or very large, and covered with a thick fuzz, generally brownish white or whitish, a part of the seed of many of these varieties being covered with a deep green fuzz. The per cent. of lint often runs rather low and is usually between 31 and 34. The bolls are not closely clustered; in some varieties the upper limbs are so short as to give the top of the plant the erect, slender appearance which is common among semi-cluster varieties. In typical plants the base limbs are of short or medium length, the number of fruit limbs and bolls relatively few, and the main stem is rather short. However, a number of varieties are included here that have all or many of their plants of the semi-cluster form.

The following varieties belong in this group: Alex. Allen, Anderson, Bancroft, Banks, Berry, Bohemian, Brown No. 1 (?), Cheise,

Christopher, Cleveland, Cliett, Cook Improved (?), Coppedge, Culpepper, Diamond, Double Header, Dongola, Drake (Ala.), Duncan, Ellis, Grayson, Gunn, Haralson, Hunnicutt Big Boll, Hutchinson, Jones, Langford, Lee, Maddox, Montclare, Mortgage Lifter, Ozier Big Boll, Reliable, Rogers, Rowden, Ruralist, Russell, Scogin, Sewell, Schley, Smith Improved, Smith Standard, Southern Wonder, Spearman, Strickland, Tatum, Texas Bur, Texas Storm Proof, Thrash, Todd, Triumph, Truitt, Webber-Russell, Whitten, and Wyche.

GROUP VI.—LONG LIMB UPLAND VARIETIES, OR PETIT GULF TYPE.

The varieties in this class grow to large size and have long limbs and long joints, the plants presenting a straggling appearance or want of compactness. The bolls and seed are both of medium to large size, the latter covered with fuzz of various shades. The per cent. of lint is usually low. The long limb form is usually accompanied by unproductiveness on average upland soil.

The following varieties are included in this group: Hagaman, Louisiana, Peeler, Petit Gulf, and probably Red Leaf.

GROUP VII.—INTERMEDIATE VARIETIES OR VARIOUS TYPES.

This group is here added to the scheme of classification published by the writer in 1899, primarily to include varieties having limbs a little too long to bring them within the semi-cluster class. It is also made to include a few other varieties that are intermediate between any two of the other seven groups.

To this division are assigned, Breeden, Boyd, Edgeworth, Eureka, Excelsior, Gold Standard, Hunnicutt (J. B.), Lewis, Meredith, Roby, Rosser, (probably) Shine Early, Sprueill, (possibly) Toole, Tucker, and Webber-Russell.

GROUP VIII.—LONG STAPLE VARIETIES, OR ALLEN TYPE.

The length of staple is the distinguishing characteristic. The lint usually measures 1 1-4 to 1 1-2 inches in length, or 28 to 34 millimeters or more. An almost invariable accompaniment to great length of staple is a low proportion of lint.

The plants grow to large size, have limbs of great length, and usually present a straggling appearance, though in some varieties only the base limbs are long, the upper limbs bearing a number of bolls close to the main stem, and giving the upper portion of the plant the appearance of great prolificacy.

The bolls are not very large, but are long, usually slender, tapering to a sharp point. Most of these long staple varieties are late in maturing a crop.

The seed are mostly of medium to large size, usually densely covered with fuzz, from which all trace of green is absent, the color be-

ing almost pure white, or in some varieties of a brownish tint. In some varieties the seed are bare. In this group are included—

Allen Long Staple, Allen Hybrid Long Staple, Black Rattler, Blue Ribbon, Cobweb, Cook Long Staple, Colthorp, Davis, Doughty (?), Eclipse (?), Ferguson (?), Florodora, Gholson, Griffin, Keno, Laclede, Matthews (?), Moon (?), New Century (?), Ozier Long Staple, Simms, Southern Hope (?), Sunflower, and Wonderful.

The varieties followed by an interrogation point are on the dividing line as grown on dry sandy upland soil at Auburn. On moister soil they usually have fiber long enough to admit them into the long staple group, or into a subdivision of that class which may be called the medium staple group.

PRODUCTIVENESS OF VARIETIES.

Tests of the yields of lint per acre have been made at Auburn for 90 varieties, in addition to a much larger number grown on areas too small to indicate the yield. Their rank in the production of lint each year when a "plot" test was made is shown by the figures in the following table. To compare any two varieties let the reader use only the figures for those years when both varieties entered the test.

From this table it will be seen that among the varieties tested for a considerable number of years the following are frequently near the top of the list: **Peerless, Peterkin, Russell, and Truitt.**

Among the varieties that have been tested only a few years, the following have usually taken high rank in yield of lint: **Cleveland Cook Improved, Jackson, Layton, Pullnot, and Toole.**

(See detailed descriptions, of illustrations of plants, and outline of bolls, of each variety, which are alphabetically arranged on subsequent pages of this bulletin.

The lists just given of course do not include all the productive varieties, but only those that have been notably productive at Auburn after being tested here long enough to get average results for several years. Each variety is separately described and illustrated in alphabetical order in the following pages.

TABLE I.—Rank of varieties of cotton on the basis of yield of lint per acre.

TABLE I.	'89	'90	'91	'92	'93	'96	'97	'98	'99	'04	'05	'06
Alex. Allen										4	10	8
Allen Hybrid Long Staple						11	16					
Allen Long Staple	2		8	21			14			14		
Bailey				12	18							
Bancroft											4	17
Barnett	4		3									
Berry											21	
Blue Ribbon										34	16	
Cameron										7	14	
Cherry Cluster	6		4	17								
Christopher											5	12
Cleveland											3	3
Colthorp Eureka				14	4							
Colthorp Pride				11	7							
Common				10								
Cook Improved										6	2	1
Cook, (W. A.) Long Staple			4	24	1							
Cook, (J. C.)				12								
Crossland					9						8	
Culpepper										11	16	9
Dalkeith Eureka				15	10							
Dearing							4	2	14			
Dickson			2	20		3	12				24	
Dixie Wilt Resistant											20	18
Doughty										10		
Drake ("Cluster?")										20		
Duncan						9	6		13			
Edgeworth										27		
Ellsworth	12											
Florodora										33		16
Garrard										27		
Gold Dust			7	22								
Grier's King										25		
Griffin Drought Proof							2					
Hagaman											12	
Hawkins	9		9	16		8	3		3	15	8	7
Hierlong			6	23	6	13						
Hunnicut, (J. B.)			1	14		12	13					
Hutchinson						1	7	7				
Jackson									1	3	17	
Johnson Excelsior										28		
Jones Improved	5		10			10	5	8	7	24		
Jones No. 1				17								
Jones Long Staple			11	19	5	14						
Keith			5	11								
King	10			6	8		5		10	17	18	5
Layton										2	5	2
Lealand										38		
Lewis Prize										16		
Lowry									12			
Mascot										18		
Matthews Long Staple				7	11							
Meredith										30		
Mortgage Lifter										31		
Nancy Hanks										19		
Okra	9			13	12	8						
Parker										33		
Peeler				7	8							
Peerless	7	1		4	6		4	11				

TABLE I.—(Continued)

	'89	'90	'91	'92	'93	'96	'97	'98	'99	'04	'05	'06	
Peterkin		2	5	1		8	3	4	1	12	6		
Petit Gulf			3	3	17								
Red Leaf										12	9	11	
Pride of Georgia										29		10	
Pullnot										8	5	4	
Rameses	8		9										
Russell								1	8	20	6	15	
Rowden										5			
Rogers										23			
Schley										25	5		
Shine										22	20		
Simms Long Staple										9			
Smith Improved								4					
Southern Hope		5	8	5									
Southern Wonder											15		
Storm Proof		4	15	2									
Strickland									11		7		
Sunflower										34		15	
Texas Bur										13	13		
Texas Oak							1	6	6				
Toole											1	3	
Truitt	1	3	2	4	2	9	5	2	2 $\frac{1}{2}$	16	14		
Tyler						6	15		9				
Webber-Russell (U.S.D.A.)												13	
Welborn Pet	3		11	13	2	15			5		22		
Whatley Improved					9	16	10						
Wise										5			
Woodfin Prolific										23	19		
Wonderful			14	16	1								
Zellner	11		1	10									
No. varieties in test	13	5	13	15	29	11	17	16	8	14	40	30	20

NO. ONE BEST VARIETY.

There is no one variety of cotton that is best for all soils and for all climatic conditions. At no experiment station has any single variety maintained the first place in productiveness year after year. When fall frosts occur at an early date the earlier varieties may have the advantage. An unusually late frost may place the late varieties far in the lead.

In years when a long staple commands a premium of four to six cents, a long staple variety, in spite of its usual lower productiveness will be more profitable on suitable land than ordinary or short-staple varieties. In other years, in other markets, and on dryer land, the most productive short staple variety may be far more profitable than a long staple.

After the invasion of the boll weevil, the best cotton to grow may not be the one that now makes the largest yield, but the one that forms a large proportion of its bolls so early in the season as to insure a crop before the weevils become excessively numerous. Likewise many other conditions keep any one variety from taking a position of universal pre-eminence.

The quality that is most universally desirable in a variety of cotton is productiveness, or high yield of lint per acre. With productiveness the farmer would be glad to unite as many of the following characters as possible:

- (1) Large size of boll, to facilitate picking.
- (2) Length of lint, with a view to a higher price per pound.
- (3) Earliness.
- (4) Storm resistance or ability to hold in the burr in spite of rain and wind, provided this quality shall not be accompanied by difficulty of picking.
- (5) Ease of picking, if not accompanied by excessive tendency for the seed cotton to be beaten or blown to the ground.

CORRELATION OF CHARACTERS.

Relation of size of bolls to size of seed and to production of lint.

An analysis of the tables that follow shows that generally varieties with big bolls have also large seed. Thus of the 49 varieties having bolls so large as to require only 65 bolls or fewer per pound of seed cotton, all but 9 have seed averaging above .13 of a gram, and all but three have seed heavier than .12 of a gram. Langford and Spearman are notable exceptions to this generalization, the large size of their bolls being due to the great number (respectively 46 and 49) of rather small seed.

Likewise the varieties with smallest bolls are those with smallest seed.

In the plot tests at Auburn the most productive varieties have been found a little more frequently among the varieties having small seed (usually varieties of the Peterkin type), than among the big

boll group, which, however, has been well represented among the winners.

High per cent. of lint is favorable to large yield of lint per acre, but not a necessary indication of large yield of lint. Thus nearly half of the 16 varieties having highest per cent. of lint in Table III have proved to be especially productive. In further confirmation of this conclusion we may add that the 65 varieties having lowest percentages of lint (less than 32.9 per cent.), include not a single name that has given proof of unusual productiveness. Furthermore, the long staple varieties, generally recognized as considerably less productive of lint than the best short staple varieties, have a low or very low per cent. of lint, often below 30.

High per cent. of lint is usually, but not always, accompanied by small seed. However, Cook Improved, Haralson, Dongola and Montclare are among the exceptional examples showing that it is possible to combine high per cent. of lint with rather large seed (and also with large bolls and productiveness).

Great length of fiber seems antagonistic to high per cent. of lint. All the data for the long staple varieties constitute the foundation for this deduction.

Relation of earliness to other qualities. Taking the King-like varieties as representing extreme earliness of opening, we conclude that *the qualities usually associated with earliness are small size of boll, small size of seed, short length of fiber, and medium or below medium productiveness.* Since earliness, in the greater part of the cotton belt, is chiefly important as a means of lessening the injury from the boll weevil, when it shall have occupied the entire cotton growing area, we should mark Bennett's important distinction between early opening and early setting of bolls. He regards the latter as much the more important as a means of decreasing injury from boll weevils. We might reasonably expect early setting of bolls and early opening to occur together, but on this point additional data are needed. Bennett concludes that we may identify early plants by their having short "joints" and by their lowest fruit limbs being near the ground.

<i>Definitions.</i>	<i>Bolls.</i>	<i>Per cent lint.</i>	<i>Size of seed.</i>
Large (or high)	40-68 per lb.	36 or above	.13 gram or more
Medium	69-80 per lb.	33-36	.11-.13 gram
Small (or low)	80 or more per lb.	30-33	below .11 gram

TABLE II.—*Number of bolls required to make 1 pound of seed cotton*

	Years	Bolls per lb		Years	Bolls per lb
Triumph	1	46	Sprueill Green Seed	4	67
Double Header	1	47	Breeden	1	68
Anderson	1	49	Corput	2	68
Bohemian	1	49	Grayson	1	68
Hunnicuttt Big Boll	1	49	Hutchinson	2	68
Texas Storm Proof	1	50	Edgeworth	5	69
Cheise Improved	1	50	Hilliard	3	69
Todd	3	51	Rich Man's Pride	1	69
Diamond	1	52	Sprueill Re-Improved	2	69
Southern Wonder	1	52	Alex. Allen (recently 60)	4	70
Sewell	1	54	Lealand	3	70
Banks	3	56	Wilson Matchless	1	70
Spearman	1	56	Gayosa Prize	1	71
Mortgage Lifter	3	58	McCall	1	71
Bancroft	3	58	Pullnot	3	71
Strickland	2	58	Simms Long Staple	3	71
Tatum	1	58	Brannon	2	72
Truitt	5	58	Cook Long Staple	5	72
Ellis	2	59	Meredith	2	72
Christopher	4	59	Sistrunk	1	72
Japan	1	59	Best	1	73
Wyche	1	59	Blue Ribbon (fuzzy seed)	4	73
Rowden	3	60	Parks Own	2	73
Smith Standard	1	60	Warren	1	73
Brown No. 1	1	61	Red Leaf	3	73
Haralson	3	61	Carolina Queen	1	74
Holloway Storm Proof	1	61	Minor	2	74
Reliable	1	61	Nancy Hanks	3	74
Thrash Select	1	61	Rosser No. 1	2	74
Berry	2	62	Big Boll	1	75
Jones Improved	4	62	Doughty Long Staple	5	75
Rogers	1	62	Little Improved	1	75
Russell	5	62	Parker	2	75
Webber-Russell	1	62	Braswell Cluster	1	76
Cliett Improved	2	62	Florodora	3	76
Culpepper	5	63	Garrard	3	76
Mongola	3	63	Gregg	1	76
Langford	1	63	Layton	3	76
Maddox	2	63	Dixie Wilt Resistant	3	76
Drake "Cluster"	5	64	Peterkin	5	76
Duncan	1	64	Branch Long Shank	1	77
Lee Improved	2	64	Gold Standard	3	77
Ruralist	2	64	Hardin	1	77
Whitten	1	64	Hawkins Jumbo	1	77
Cleveland	3	65	Hodge	1	77
Coppedge	1	65	Mattis	3	77
Doughty Big Boll	1	65	No. 145 (U. S. D. A. selection)	1	77
Gunn	3	65	Peerless	4	77
Montclare	3	65	Pride of Georgia	3	77
Texas Bur	4	65	Wise	5	77
Cook Improved	3	66	Cummings	3	78
Griffin	3	66	Favorite	1	78
Roby	1	66	King No. 3	1	78
Scogin	3	66	Lewis Prize	3	78
Spruiell Prolific	1	66	New Century	2	78
Matthews Long Staple	2	67	Texas Oak	2	78
Schley	3	67	Bur	1	79
Smith Improved	3	67			

TABLE II.—(Continued)

	Years	Bolls per lb		Years
Hawkins -----	5	79	Ferguson -----	2
Lowry -----	2	79	King -----	4
Missionary -----	1	79	Butler -----	1
Mitchell -----	1	79	Borden Prolific -----	1
Moss -----	2	79	Cobweb -----	3
Norris -----	1	79	Excelsior -----	4
Ozier -----	2	79	Herlong -----	1
Pinkerton -----	3	79	Ptomey -----	1
Speight -----	1	79	Victor -----	2
Blue Ribbon (black seed) ----	4	80	Anson Cream -----	2
Todd Early -----	1	80	Bates Little Brown -----	1
Tucker -----	2	80	Shine Early -----	5
Berryhill -----	4	81	Black Rattler -----	2
Gholson Long Staple -----	2	81	Welborn -----	3
Improved Long Staple -----	1	81	Cameron Early -----	4
Johnson Excelsior -----	1	81	Toole -----	3
No. 146 (U. S. D. A selection) -	2	81	Eclipse -----	1
Petit Gulf -----	2	81	Shine Black Seed -----	3
Boyd Prolific -----	3	82	Sterling -----	2
Jackson -----	5	82	Woodfin Prolific -----	1
King No. 1 -----	4	82	Eureka -----	1
Bingham -----	1	83	Bates Poor Land -----	1
Grier -----	3	83	Defiance (Drake) -----	1
Dozier -----	1	83	Laclede -----	1
Moon -----	1	83	Combination -----	1
Ozier Long Staple -----	1	83	Colthorp -----	3
Sunflower -----	3	83	Mascot -----	2
Woodfin Non-Pariel -----	3	83	Braddy -----	2
Allen Long Staple -----	4	84	Early Gayosa -----	1
Crossland -----	3	84	Shine No. 2 -----	1
Extra Early -----	1	84	Dearing -----	2
Hagaman -----	2	85	Dickson -----	3
Herndon Select -----	3	85	Keno -----	1
Texas Wood -----	4	85	Barnett -----	2
Allen Hybrid Long Staple ----	1	86	Seabrook (Sea Island) -----	1
Tyler Limb Cluster -----	1	86	Sea Island -----	3

TABLE III.—Varieties of cotton arranged according to per cent of lint

	Years	per cent		Years	per cent
Shine No. 2	1	41.5	Langford	1	35.1
Victor	2	40.5	Garrard	3	35.0
Bates Little Brown	1	39.6	Rosser No. 1	2	35.0
Wise	5	39.5	Maddox	2	34.9
Layton	3	39.0	Tucker	2	34.9
Cook Improved	3	38.9	Cliett	2	34.8
Todd Early	1	38.9	Breeden	1	34.7
Combination	1	38.8	Culpepper	5	34.7
Eureka	1	38.6	Pride of Georgia	3	34.7
Triumph	1	38.6	Hawkins	5	34.6
Toole	3	38.5	Hilliard	3	33.6
Favorite	1	38.3	No. 146 (U. S. D. A. selection)	2	34.5
Moss	2	38.3	Excelsior (Moore)	4	34.5
Haralson	3	38.2	Hutchinson	2	34.4
Jackson	5	38.0	McCall	1	34.4
Peterkin	5	38.0	Minor	2	34.4
Roby	1	38.0	Mortgage Lifter	4	34.4
Berryhill	4	37.8	No. 145 (U. S. D. A. selection)	1	34.4
Braddy	2	37.8	Weber-Russell	1	34.4
Brown No. 1	1	37.7	Alex. Allen	4	34.3
Grier	3	37.7	Braswell Cluster	1	34.3
Johnson Excelsior	1	37.7	Christopher	4	34.3
Little	1	37.7	Hagaman	2	34.3
Bates Poor Land	1	37.6	Missionary	1	34.3
Borden	1	37.5	Sprueill Green Seed	4	34.3
Crossland	3	37.5	Defiance (Drake)	1	34.2
King No. 1	4	37.5	Texas Oak	2	34.2
Whitten	1	37.4	Louble Header	1	34.1
Texas Wood	4	37.2	Herlong	1	34.1
Blue Ribbon (wooly seed)	4	37.0	Schley	3	34.1
Sistrunk	1	36.9	Smith Improved	3	34.0
Cameron Early	4	36.8	Southern Hope	3	34.0
Montclare	3	36.8	Woodfin Prolific	1	34.0
Shine Black Seed	3	36.8	Parks Own	2	33.8
Red Leaf	3	36.8	Warren	1	33.8
Brannon	2	36.4	Boyd Prolific	3	33.7
Gregg	1	36.4	Cheise Improved	1	33.7
Pullnot	3	36.3	Dozier	1	33.7
King	4	36.3	Speight	1	33.7
Thrash	1	36.2	Banks	3	33.6
Rich Man's Pride	1	36.2	Colthorp	3	34.6
Pinkerton	3	36.2	Branch Long Shank	1	33.6
Gold Standard	3	36.1	Lealand	3	33.6
Rowden	3	36.0	No. 149 (U. S. D. A. selection)	1	33.5
Dongola	3	36.0	Ozier	2	33.6
Carolina Queen	1	35.8	Holloway Storm Proof	1	33.5
Lewis Prize	3	35.8	King No. 3	1	33.5
Mascot	2	35.8	New Century	2	33.5
Edgeworth	5	35.7	Sterling	2	33.5
Rogers	1	35.7	Peerless	4	33.4
Nancy Hanks	3	35.6	Tatum Big Boll	1	33.2
Welborn	3	35.6	Texas Bur	4	33.2
Ptomy	1	35.5	Tyler Limb Cluster	1	33.2
Hodge	1	35.4	Herndon Select	5	33.1
Extra Early	1	35.3			
Anson Cream	2	35.2			
Bingham	1	35.2			
Cleveland	3	35.1			

TABLE III.—(Continued.)

	Years	per cent		Years	per cent
Lowry -----	2	33.1	Griffin -----	3	31.7
Dixie Wilt Resistant -----	1	33.1	Early Gayosa -----	1	31.5
Texas Storm Proof -----	1	33.1	Corput -----	2	31.4
Parker -----	2	33.1	Matthews Long Staple -----	2	31.4
Wyche Big Boll -----	1	33.1	Florodora -----	3	31.3
Doughty Big Boll -----	1	33.0	Ozier Long Staple -----	1	31.3
Reliable -----	1	33.0	Simms Long Staple -----	3	31.3
Todd Improved -----	3	33.0	Gholson Long Staple -----	2	31.2
Bancroft Herlong -----	3	32.9	Norris -----	1	31.2
Jones Improved -----	4	32.9	Ferguson -----	2	31.2
Russell -----	5	32.9	Hawkins Jumbo -----	1	31.1
Truitt -----	4	32.9	Scogin -----	3	31.1
Blue Ribbon (black seed) -----	4	32.8	Black Rattler -----	2	31.0
Bohemian -----	1	32.8	Dearing -----	2	31.0
Burr -----	1	32.8	Laclede -----	1	31.0
Coppedge -----	1	32.8	Sewell -----	1	31.0
Drake "Cluster" -----	5	32.8	Anderson -----	1	30.9
Meredith -----	2	32.8	Grayson -----	1	30.8
Moon Long Staple -----	1	32.7	Hunnicuttt Big Boll -----	1	30.8
Sprueill Re-Improved -----	2	32.6	Butler -----	1	30.4
Strickland -----	3	32.5	Smith Improved -----	3	30.4
Berry -----	2	32.4	Hardin -----	1	30.3
Keno -----	1	32.4	Ruralist -----	2	30.3
Mattis -----	3	32.4	Cook Long Staple -----	5	30.2
Dickson -----	3	32.3	Eclipse -----	1	30.2
Lee -----	2	32.3	Doughty -----	5	30.1
Barnet -----	2	32.2	Duncan -----	1	30.0
Wilson -----	1	32.2	Japan -----	1	29.7
Big Boll -----	1	32.1	Sprueill Prolific -----	1	29.5
Cummings -----	3	32.1	Davis Long Staple -----	2	29.2
Ellis -----	2	32.1	Sunflower Long Staple -----	3	29.2
Gunn -----	3	32.1	Diamond -----	1	29.1
Best -----	1	32.0	Cobweb -----	3	28.8
Shine Early -----	5	32.0	Improved -----	1	28.3
Woodfin -----	3	32.0	Seabrook -----	1	28.1
Spearman -----	1	31.9	Allen Long Staple -----	4	28.0
Mitchell -----	1	31.8	Allen Hybrid Long Staple -----	1	26.9
Petit Gulf -----	2	31.8	Sea Island -----	3	26.5
			Gayosa Prize -----	1	24.9

TABLE IV. *Weight of 100 seed; varieties arranged according to size of seed.*

	Years	Grams		Years	Grams
Todd Improved	3	16.89	Cook Improved	3	12.65
Duncan	1	16.64	Improved Long Staple	1	12.65
Sewell	1	16.54	Triumph	1	12.6
Bancroft Herlong	3	16.40	Hutchinson	2	12.6
Banks	3	16.28	Norris	1	12.6
Gayosa Prize	1	16.03	Doughty Big Boll	1	12.5
Holloway's Storm Proof	1	16.03	Braswell	1	12.3
Texas Storm Proof	1	15.98	Scogin	3	12.4
Rowden	3	15.91	Big Boll	1	12.4
Anderson	1	15.58	Cook (W. A.) Long Staple	5	12.4
Spruiell Prolific	1	15.53	Hawkins Jumbo	1	12.4
Thrash	1	15.52	Sprueill Green Seed	4	12.4
Double Header	1	15.34	Cleveland	3	12.3
Ellis	2	15.31	Cummings	3	12.3
Mortgage Lifter	3	15.27	Rich Man's Pride	1	12.3
Truitt	4	15.06	McCall	1	12.2
Lealand	3	15.04	Webber-Russell	1	12.2
Strickland	2	14.96	Alex. Allen	4	12.2
Maddox	2	14.95	Parks	2	12.2
Cheise Improved	1	14.82	Texas Bur	4	12.2
Southern Wonder	1	14.74	Ruralist	2	12.2
Lee Improved	2	14.46	Pullnot	3	12.2
Russell	5	14.34	Bur	1	11.1
Coppedge Improved	1	14.32	Hilliard	3	11.1
Rogers	1	14.30	Lowry	2	11.1
Diamond	1	14.28	Meredith	2	11.1
Lunnicut Big Boll	1	14.27	New Century	2	11.1
Dongola	3	13.92	Floradora	3	11.1
Cliett	2	13.87	Garrard	3	11.1
Berry Big Boll	2	13.85	Cobweb	3	11.1
Culpepper	5	13.65	Edgeworth	5	11.1
Matthews Long Staple	2	13.62	Moon	1	11.1
Best	1	13.55	Tatum	1	11.1
Bohemian	1	13.54	Breeden	1	11.1
Christopher	4	13.53	Allen Hybrid Long Staple	1	11.1
Smith Standard	1	13.49	Griffin	3	11.1
Gunn	3	13.46	Mitchell	1	11.1
Grayson	1	13.44	Simms Long Staple	3	11.1
Japan	1	13.44	Ferguson	2	11.1
Montclare	3	13.37	King No. 3	1	11.1
Brown No. 1.	1	13.29	Schley	4	11.1
Smith Improved	3	13.27	Seabrook (Sea Island)	1	11.1
Wyche Big Boll	1	13.27	Blue Ribbon (black seed)	4	11.1
Peerless	4	13.24	Roby	1	11.1
Haralson	3	13.19	Hawkins	5	11.1
Jones Improved	4	13.19	Gholson Long Staple	2	11.1
Whitten	1	13.19	Minor	2	11.1
Drake "Cluster"	5	13.16	No. 145 (U. S. D. A. selection)	1	11.0
Sea Island	3	13.15	Johnson Excelsior	1	11.0
Blue Ribbon (fuzzy seed)	1	13.10	Nancy Hanks	3	11.0
Branch Long Shank	1	13.06	Excelsior	4	11.0
Doughty Long Staple	5	13.06	No. 149 (U. S. D. A. selection)	1	11.0
Corput	2	12.99	Parker	2	11.0
Sprueill Re-Improved	2	12.82	Bingham	1	11.0
Ozier Big Boll	2	12.75	Warren	1	11.0
Reliable	1	12.70	Defiance (Drake)	1	11.0

TABLE IV.—(Continued.)

	Years	Grams		Years	Grams
Pride of Georgia	3	10.70	Early Gayosa	1	9.78
Pinkerton	3	10.69	Berryhill	4	9.77
Dixie Wilt Resistant	1	10.67	Colthorp	3	9.68
Ozier Long Staple	1	10.66	Hodge	1	9.69
Langford	1	10.63	King	4	9.66
Spearman	1	10.57	Texas Oak	2	9.66
Boyd Prolific	3	10.55	Wilson	1	9.62
Gregg	1	10.55	Crossland	3	9.60
Hardin	1	10.52	Dickson	3	9.59
Sunflower	3	10.52	Todd Early	1	9.58
Rosser No. 1.	2	10.44	Peterkin	5	9.52
Brannon	2	10.41	Jackson	5	9.51
Little	1	10.40	Keno	1	9.48
Petit Gulf	2	10.39	Ptomey	1	9.45
Allen Long Staple	4	10.38	Lewis Prize	3	9.43
Gold Standard	3	10.36	Black Rattler	2	9.39
Hagaman	2	10.36	Woodfin Prolific	1	9.38
Mattis	3	10.33	Dozier	1	9.33
Carolina Queen	1	10.31	Herndon Select	3	9.20
Grier	3	10.21	Mascot	2	9.13
No. 146 (U. S. D. A.)	2	10.21	Laclede	1	8.97
Texas Wood	4	10.17	Cameron Early	4	8.94
Shine Early	5	10.16	Layton	3	8.88
Red Leaf	3	10.15	Wise	5	8.72
Woodfin	3	10.11	Favorite	1	8.70
Borden	1	10.04	Toole	3	8.57
Moss	2	9.98	Barnett	2	8.56
Welborn	3	9.97	Shine Black Seed	3	8.38
Herlong	1	9.96	Tyler	1	8.36
Eclipse	1	9.94	Victor	2	8.33
Tucker Improved	2	9.92	Extra Early	1	8.26
Dearing	2	9.89	Butler	1	8.18
Manson Cream	2	9.88	Combination	1	8.17
Sistrunk	1	9.84	Bates Poor Land	1	8.16
Sterling	2	9.84	Eureka	1	8.05
King No. 2.	1	9.82	Shine No. 2.	1	8.03
Speight	1	9.82	Braddy	2	7.64
Missionary	1	9.80	Bates Little Brown	1	5.48

CONDITIONS UNDER WHICH THESE DESCRIPTIONS, PHOTOGRAPHS AND
WEIGHINGS WERE MADE.

All descriptions and photographs herein published were made from typical plants grown at Auburn, Alabama, on upland fields. The soil here is sandy and dry and under these conditions the cotton plant makes relatively a small growth of stalk. The fiber of the long staple varieties is shorter here than when the same variety is grown in moister soil. Time and conditions have not thus far permitted careful and repeated measurements of fiber, and until this can be done by more accurate methods than are sometimes used, it is thought best to make no comments on the character of fiber except where the staple is distinctive. There has usually been an application of from 400 to 600 pounds of complete fertilizer per acre, and the average yield for different years has varied from about three-fourths to about one and one-eighth bales per acre. Photographs were taken about the time of first frost, and since the date of making the photographs necessarily varied, the pictures should not be taken as indicating relative earliness of varieties. Neither do the figures show the relative sizes of plants. The drawings of bolls are exactly the same size as the original boll, chosen as apparently typical of each variety.

Data as to size of bolls, weight of seed, per cent of lint, etc., are as a rule based on the average of three samples for each year that the given variety was tested, or fifteen separate samples in the case of a variety tested five years. The lint was removed by hand picking, and comparisons with percentages of lint from ginning some of the same varieties show but little difference, say 1-2 to 1 per cent higher for hand picking. The area available did not permit the growing of all varieties on plots large enough to determine the yield per acre. Where such yields were determined they are indicated in Table I.

The writer cheerfully records his obligations to those who have assisted in this work, especially to L. N. Duncan, Assistant Agriculturist, who has prepared most of the tables from our records, and has otherwise given most effective help. Among others to whom credit is due are C. M. Floyd, Superintendent of the Farm, and C. R. Hudson, formerly Assistant Agriculturist.

The writer is well aware that the plain statement of the undesirable qualities, or the failure to find conspicuous merit in a variety, may bring disappointment to the originator or exploiter and may perhaps bring censure upon the experimenter. However, conscious of entire impartiality, recognizing the possibility of errors of judgment and the limitations imposed by the small number of tests of certain recently introduced varieties, he can only present his findings with the hope that they will aid the farmer to choose the variety best for his conditions and to point out merits and defects, note of which may aid originators of new varieties still further to improve their creations.

DESCRIPTIONS OF VARIETIES.

Alex Allen.—This is a variety which A. W. Allen, Temple, Ga., states that he originated in 1898 from a single plant found in a field of mixed varieties. This is a compact, erect, big boll variety with semi-cluster form. Plants medium size, short jointed. Maturity early to medium. The bolls the last two years averaged 60 per pound of seed cotton, or larger than in our earlier tests. Storm resistance slight; per cent of lint medium or above, (34.3). Seed medium in size, fuzzy, mostly white, but some of them greenish white and some brownish white. Lint short. Rank in yield of lint in field tests at Auburn 4th, 10th and 8th. This is a promising prolific variety, useful on account of its yield, earliness, and large size of bolls.

Allen.—(Synonyms, Allen Long Staple, Allen Improved, Allen Silk, and Talbot). Originated by James B. Allen, Port Gibson, Miss., who reports it to be a cross between his Allen Hybrid and Yellow Bloom. The plants are tall with long base limbs and numerous rather short central and upper limbs. Maturity medium to late. Bolls small (84 per pound of seed cotton), or small to medium, and pointed; locks 4 or 5; storm resistance, slight. Per cent. of lint very low, (28 per cent.) Seed small to medium as judged by weight, (.104 gram), but appearing large because of abundant fuzz. Lint very long and fine. Rank in yield 2nd, 18th, 14th, and 21st. This is a well established, standard long staple variety, with excellent quality of lint and a well balled plant.

Allen Hybrid Long Staple.—This is one of the earlier varieties originated by James B. Allen, Port Gibson, Miss., and is one of the parents of Allen Long Staple. As grown here it differed but slightly, if at all, from its descendant. The bolls are small (86 per pound of seed cotton); per cent of lint very low (26.9); seed small and fuzzy, mostly white. Maturity late. Rank in yield of lint 11th and 16th.

African.—(See Jackson).

Anderson.—Grown only in 1906. Seed received from J. F. Anderson, Williamson, Ga. This is a big boll variety with plant typical of that group, but better supplied with bolls than the average big boll variety. On type of plant this was regarded as one of the best of the big boll varieties grown at Auburn for the first time in 1906. However, the low per cent. of lint, (30.9), makes further test necessary before we can pronounce this variety a productive one. Plant medium in maturity and in height; limbs medium length; bolls very large (49 per pound), mostly five locks, opening wide. Seed very large and fuzzy, white and pale greenish white. Lint medium in length. Yield not determined.

Anson Cream.—(Synonym, probably Peterkin). Seed was obtained from North Carolina. This variety belongs in the Rio Grande group and is probably a local name for, or a selection from, Peterkin. Seed of some plants are naked, while seed of other plants,

that are probably impurities, are densely covered with whitish brown fuzz. (See Peterkin.)

Bancroft.—(Synonym, Bancroft Herlong, Jones Herlong, and probably Russell.) Seed was obtained from E. Bancroft, Athens, Ga. This old variety belongs in the big boll group, and has a rather short-limbed plant. The bolls are large, 58 per pound, long, tapering gradually to a point. The seed are large, fuzzy, deep green and brownish green. Maturity late. The leaves have the large size and relatively shallow indentations between lobes that distinguish the leaves of Russell. This variety is probably the parent of the Russell, for in size and shape of leaves, in size and shape of boll, and in color and size of seed the two are practically identical. Lint medium in length. Rank in yield of lint at Auburn 4th and 17th.

Banks.—(Synonym, Banks Big Boll). This is a big boll variety with limbs of medium length. The bolls are large (56 per pound), roundish, either blunt or abruptly pointed. Locks mostly 4. Storm resistance medium. This variety very closely resembles Truitt in form of plant, size of bolls, size and appearance of seed, and in per cent of lint (33.6); seed very large, (.163 gram), fuzzy, whitish brown. Lint of medium length. Maturity medium.

Bailey.—This variety, which was grown at Auburn about 1890-1893, is now probably extinct. As described in Alabama Experiment Station Bulletins 33 and 56, Bailey cotton had a small prolific plant, with branches of medium length, long "joints," small roundish bolls; seed small, mostly naked and black; staple of medium length; maturity early; per cent of lint very low.

Barnes.—(Synonym, Baggarly). Grown only in 1903, using seed from J. R. Banks, Newnan, Ga. There are several types of plants, one similar to Russell, another to the long limb group, and some plants resembling Peterkin. The data given in tables are from the plants resembling Russell.

Barnett.—An old semi-cluster variety now almost or quite extinct. The plants are not very uniform, and are of medium maturity and fruitfulness. The bolls are small, roundish or ovate, some of them abruptly pointed, mostly 4 locks per boll. Per cent of lint below medium (32.2), although the seed as recently obtained were small and exactly similar in appearance to Peterkin.

Bate's Little Brown.—(See Peterkin.) Seed was obtained from R. Bates, Jackson, S. C. In all important qualities this cotton is similar to Peterkin.

Bates's Poor Land.—(Synonyms, Peterkin, Bates Little Brown). Seed was obtained from R. Bates, Jackson, S. C. In all important qualities similar to Peterkin and Bates's Little Brown.

Berryhill.—F. M. Berryhill, Aline, Amite County, Mississippi, states that he originated this variety in 1898 by selection from Brannon. This variety contains some plants resembling in form Peterkin and King, but more of the semi-cluster form. The seed are small, fuzzy, mostly brownish; per cent lint 38; bolls small (81 per pound). In maturity it is medium to early; moderately prolific.

Locks mostly 5. This variety is very similar to Lewis.

Berry.—(Synonym, *Berry Big Boll*). J. L. Berry, Griffin, Ga., states that he originated this in 1896, from unknown parentage. This is a big boll variety. The bolls are large, (averaging 62 per pound), abruptly pointed. The per cent of lint averaged low, (32.4). The seed are large, fuzzy, mostly white, greenish white, and brownish white. In all of the qualities mentioned above *Berry* is similar to *Truitt*, but differs from the latter in being earlier. Locks 4 to 5. Storm resistance fair. Rank in yield of lint at Auburn in 1905, 21st. The most promising characteristic of this variety is its earliness for a big boll variety.

Best.—Grown only in 1903. Plants of the *King* form, but per cent of lint lower and size of bolls larger than that type. Maturity early. Seed greenish white.

Big Boll.—Of doubtful classification, the bolls being of medium size and too small to admit it to the big boll class, to which in other qualities it would belong.

Bingham.—Grown only in 1895. This is apparently a mixed variety, having some long limb and some almost semi-cluster plants. Seed small to medium, brownish to greenish. Locks mostly 5. Per cent of lint medium or above. Bolls small (83 per pound of seed cotton).

Black Rattler.—Seed from W. E. Collins, Mayersville, Miss. This is a long staple variety, having plants similar to *Allen Long Staple*. The seed are naked and the per cent of lint averaged 31. The bolls are small (91 per pound), ovate and abruptly pointed, and most of them containing 4 locks. Lint fine and long.

Blue Ribbon.—This variety was originated in 1900 by the South Carolina Experiment Station as a result of a cross between *Allen Long Staple* and *Dickson*. It is distinctly a semi-cluster variety of the long staple group, but the lint is not quite so long as the stand-and long staple varieties. The bolls are small to medium in size (averaging 80 per pound), ovate, and pointed, with 5 or 4 locks. The plant is medium to tall, abundantly fruited, compact, erect with short joints, the upper limbs short, the base limbs medium to long. Maturity, early to medium, and the earliest of the long staple group. Per cent of lint 32.8, or one of the highest of the long staples. Seed are medium size. There are two strains of *Blue Ribbon* differing chiefly in the fact that one has nearly naked black seed; the other seed covered with white, or brownish white fuzz. Rank in yield of lint at Auburn 24th and 16th. The earliness, compact shape, number of bolls and length of lint make this a promising variety, and the staple should command sufficient premium to make this a competitor in point of profit with the best short staple varieties.

Bohemian.—This is a big boll variety from Texas with the characteristic shape of plants of that group. The bolls are very large, 4 $\frac{1}{2}$ making a pound of seed cotton; the per cent of lint is low (32.8) the seed are large, fuzzy, and mostly white. The lint is unusually long for this class of cotton. The plant is large and of pyramida

shape with rather long limbs. Maturity, late. Bolls ovate and abruptly pointed.

Borden.—The high per cent of lint (37.5), small size of bolls (89 per pound), and small size of seed suggest that this may be a member of the Peterkin group. The seed are fuzzy and brownish. Seed were obtained from A. Borden, Goldsboro, N. C.

Boyd.—Seed of this old variety were obtained from H. C. Prevost, New Orleans, La. The plant is of medium size, somewhat variable, sometimes approaching the semi-cluster form, and assignable to the intermediate group. The seed are scantily covered with brownish fuzz and resemble Peterkin. Bolls small (82 per pound), 4 or 5 locks, short and roundish, sometimes abruptly pointed and sometimes blunt. Per cent of lint 33.7. Maturity early to medium. Lint, short. This variety is interesting only as being the reputed parent of a number of better varieties.

Braddy. (Synonym, Peterkin). This strain was selected by L. C. Braddy, Dillon, S. C., from a variety known locally as Simpson, which was probably Peterkin. The plant has the typical shape of the Peterkin group and has numerous, medium to long, rather slender limbs. In per cent of lint (37.8), small seed, naked or brownish fuzzy seed, this variety appears to be identical with Peterkin, though bolls were smaller (99 per pound) and a somewhat larger proportion of seed was naked in tests made at Auburn. In maturity it is medium. The plant is prolific, the type well fixed. In a publication of the United States Department of Agriculture, the statement is made that the seed are gray, and tufted, and the lint very curly.

Branch Long Shank.—M. L. Branch, Bishop, Ga., states that this has also been known under the name of Shank-High. But a comparison of the seed as grown under the first name at Auburn with seed distributed in 1907 by the United States Department of Agriculture suggests that either this cotton is wanting in uniformity or that the two names are not synonyms. The Branch seed are mostly brownish white, while the seed from the Department are mostly white with some greenish seed. The plant is tall, rather poorly supplied with limbs and bolls. The bolls have 4 and 5 locks, and are of medium size (77 per pound). The seed are large and the per cent of lint 33.6. Maturity medium. Lint short to medium.

Brannon.—(Synonym, Little Brannon and probably Peterkin). This is apparently a synonym of Peterkin, as indicated by the high per cent of lint, 36.4, small seed, most of them naked, or scantily covered with brownish fuzz. The points in which it differs from Peterkin are the larger size of bolls (72 bolls making one pound of seed cotton), and longer limbs or more straggling form of plant. It might even be placed in the long limb group.

Braswell.—(Synonym, Braswell Cluster). Seed was obtained from J. R. Pitt, Racy Mount, N. C. The plants were very variable, there being a few of a semi-cluster type and some long limbed or straggling. The semi-cluster plants had bolls of medium size, me-

dium per cent of lint; seed mostly white, and of medium size, fuzzy. In maturity the plant ranks as medium, and it is rather prolific.

Breeden.—Seed were obtained from T. C. Breeden, Lester, S. C. This is a rather tall plant, and seems to have fruit limbs a little longer than in the semi-cluster group; hence it is classed in the intermediate group. The bolls are above medium size (68 per pound), usually with five locks, oval with abrupt point. Storm resistance, good. The seeds are medium size and brownish and whitish brown colors, being of a lighter shade of brown than seed of Gold Standard.

Brown No. 1.—Seed was obtained from M. L. Brown, Bremen, Ga. In high per cent of lint (37.7), large size of boll (61 per pound), and in form of plant, which varies between typical big boll shape and tall, short limbed form, this cotton is practically identical with Cook Improved. The seed are a little larger and contain a larger proportion of dark greenish brown seed, the seed from some plants resembling Bancroft. This is a prolific variety of medium maturity.

Bur.—Bolls, medium to small, classification uncertain.

Butler.—This cotton, from North Carolina, embraced plants of several types. In maturity it ranked as medium. Per cent of lint only 30.4.

Cameron.—(Synonym, Cameron Improved). This was originated about 1895 by R. R. Cameron, West Greene, Ala. The parent varieties were Drake "Cluster" and Peterkin. The characteristics of both parent plants are plainly shown in the form of plant, some plants being of characteristic Peterkin shape, others tall with short upper limbs, and still others resembling the big boll type. At present this cotton more nearly resembles the Peterkin than the Drake "Cluster." Its high per cent of lint (36.8), small bolls (92 per pound), and small seeds, which are either naked or covered with brown fuzz, are identical with Peterkin. The bolls are mostly oval or ovate, abruptly pointed, with 5 or 4 locks. Maturity medium, storm resistance medium to poor; rank in yield of lint at Auburn, 7th and 14th. We are justified in assigning this to the Rio Grande group except a minority of the plants which show traces of other ancestry.

Carolina Queen.—(Synonym, Peterkin). Seed were obtained from J. C. Fowke, Blalock, S. C., who has selected seed of unknown origin, but which evidently must have been Peterkin. In high per cent of lint (35.8), form of plant, small seed, and the brown fuzzy covering of most seed, this plant resembles Peterkin, but differs from Peterkin only in having nearly all of its seed fuzzy, and in the slightly larger bolls (74 per pound). This may be considered as a fuzzy-seed form of Peterkin, promising because of its larger bolls.

Champion.—(See Ptoney and Peterkin.)

Cheise.—This unusual name is probably a local designation for a variety of the big boll class from Texas. Bolls are large, seed large and brownish white.

Cherry Cluster.—This variety from South Carolina is probably

now extinct. From Alabama Experiment Station Bulletins Nos. 33 and 56 we learn that the plant was of medium size, compact, well limbed and prolific, resembling Peerless, but having longer limbs and joints; bolls small and roundish; seed small, fuzzy; maturity early.

Christopher.—This is said to have been originated by R. H. Christopher, LaGrange, Ga., about 1880. In form of plant, size of bolls (only 59 per pound of seed cotton), large size of seed (.135 gram), medium per cent of lint (34.3), and characteristic form of plant, this variety belongs to the big boll group. Most of the plants have the rather low, symmetrical, diffuse growth characteristic of that group. Some of them have rather short upper limbs, forming what may be called the erect type of big boll. The bolls are large (59 per pound), roundish, often blunt, and more frequently contain 5 than 4 locks. Maturity medium. The seed are large, fuzzy, and mostly brownish white, with an occasional greenish white seed. Rank in yield of lint at Auburn, 5th and 12th. This is a prolific big boll cotton, resembling Truitt in most points, but differing from the latter in having a larger proportion of roundish blunt bolls.

Cleveland.—J. R. Cleveland, Decatur, Miss., states that he originated this variety about 1885 by selecting seed from a cotton bearing no known name. The plant is tall and is well supplied with bolls and with limbs of medium or short length, tending toward the erect type of big boll plant. The bolls are large, (65 per pound) usually having five locks and falling out easily, this being the chief shortcoming of this variety. The seed are of medium size, fuzzy, brownish white, with some greenish seed. Bolls large, roundish, and pointed or bluntish. This is one of the earliest of the big boll group, ranking as early to medium. At Auburn, it has been one of the most productive of the big boll group, ranking in yield of lint, 3d in 1905, and 3d in 1906, or a little below Cook Improved.

Cliett.—Seed were obtained from R. A. Cliett, Harlem, Ga. The plants are mostly of characteristic big boll form, or in some cases of erect big boll form. The bolls are large, (63 to the pound of seed cotton), and roundish. The per cent. of lint averaged 34.8. Maturity medium. The seed are large, fuzzy, brownish white and greenish white.

Cobweb.—W. E. Collins, Mayersville, Miss., states that he originated this variety about 1878, using Sea Island and Peeler as parents. It resembles Colthorp and Black Rattler. The plant is tall, open of pyramidal form and is a long staple upland variety. The bolls are small (89 per pound), slender, long pointed, and usually having four locks. This variety has naked seed, of medium size, (.117 gram), the naked seed doubtless coming from the Sea Island parent. The per cent. of lint is 28.8. The lint is long and fine.

Cook Long Staple.—(Synonym, W. A. Cook.)

This variety is said to have been originated by W. A. Cook, New-man, Miss. The plant is medium to tall, of rather straggling or limby form, with long internodes, the plants with best fiber resembling in form Allen Long Staple. Maturity, medium to late. The

bolts are of medium size and larger than those of any other long staple tested, except Griffin, 72 bolts averaging one pound of seed cotton. The bolts are ovate, either long pointed or abruptly pointed; per cent. of lint 30.2; seed of medium size, mostly white or brownish white. The fiber is abundant and of long staple, but neither so long nor so fine as that of Allen Long Staple, and Griffin. The seed obtained in recent years has been badly mixed with some short staple variety. This is apparently one of the most productive varieties of the long staple group, having ranked in the tests at Auburn as 1st, 4th, and 24th, in different years.

J. C. Cook.—A variety of purple leaf cotton, probably now extinct or represented by some improved descendant, (See Red Leaf.) The writer, who has been unable to obtain any seed under this name, puts on record here data taken from earlier publications of the Alabama Experiment Station. In 1891 this variety was the least productive of 12 varieties tested. Its staple was very short; per cent. of lint 34.5. "Stalk, medium, pyramidal, purple. Leaves purple underneath, presenting a singular appearance. Devoid of wood limbs. Bolts round; staple very short; not prolific; very late."

Cook.—(Synonym, Cook Improved.) This variety was originated by J. R. Cook, Ellaville, Ga., in 1895. He believes it to be a natural cross between some early variety and one known locally as Beat All. In form of plant Cook cotton is somewhat variable. About 60 per cent of the plants are tall with short fruit limbs, and few medium length base limbs. The remaining plants are mostly of the diffuse big bolt type with fruit limbs medium to long. The bolts are large, (66 making a pound of seed cotton), roundish, often blunt, with usually five locks. The seed cotton falls out easily, which is the point of greatest weakness in the variety. In maturity, Cook is early to medium, ranking with Cleveland and Berry Big Bolt as the earliest varieties having large bolts. The bolts open well and are easily picked. The per cent of lint is very high, the average at Auburn being 38.9 per cent. This has been one of the most prolific varieties both at Auburn and at other stations. Its rank in yield of lint at Auburn during the past three years has been 6th, 2nd, and 1st. Its productiveness, large size of bolts and extremely high per cent of lint have brought this variety recently into deserved popularity.

Colthorp.—(Synonyms, Colthorp Pride, Laclede, Colthorp Black Rattler.)

Seed was obtained from Colthorp & Co., Talla Bena, La., who state that this cotton originated about 1902 from a few locks of cotton of unknown origin, having black seed and good length of staple. This is a long staple variety but as grown at Auburn the staple was not quite as long as Griffin and Allen. This cotton very closely resembles Black Rattler and Cobweb in form of plant, small size of bolts (98 per pound), naked black seed, and in character of lint. Per cent. of lint averaged for three years 33.6.

Colthorp Eureka.—(See Keno.)

Combination.—R. Bates, Jackson, S. C., states that he originated

this variety. It has a high per cent of lint (38.8) , small, fuzzy, brownish seed, and a plant similar to Peterkin. Although the plant bears many bolls, their small size, (97 to the pound of seed cotton), makes this variety worthless. This is believed to be a strain of fuzzy seed Peterkin.

Coppedge.—Seed were obtained in 1899 from C. S. Coppedge, Nyon, Ga. This is a big boll variety (65 bolls per pound) with large, fuzzy, brownish white seed. The storm resistance is fair; maturity medium.

Corput.—(Synonym, Corput Find.) This cotton as grown at Auburn for two years was too badly mixed to be described. It contained plants that could not be distinguished from Jackson, and others similar to Peterkin.

Crossland.—(Synonyms, Peterkin, Carolina Queen, Moss, Texas Wood, etc.)

In form of plant, size and shape of boll, in small seed, and in appearance of seed, which are partly naked and partly covered with a scant brown fuzz, we have not been able to find any difference between this cotton and the Peterkin variety. When tested in field plots at Auburn, its average rank in yield of lint was about the same as that of Peterkin.

Crawford Peerless.—(See Peerless).

Culpepper.—(Synonym, probably Wyche.) J. E. Culpepper, Luthersville, Ga., states that he originated this variety about 1892, using Wyche and Dickson as parents. It is now exactly similar to Wyche and shows no trace of its alleged Dickson parentage, and should probably be regarded as a selection from Wyche. In form of plant this variety is typical of the big boll group, being rather low, spreading, and having limbs of medium length. The bolls are large, (63 making one pound of seed cotton), ovate, rather blunt pointed, opening well and having very poor storm resistance. There are variously five and four locks. The per cent. of lint averaged 34.7. The seed are large and covered with a dense fuzz. Most seed are brownish white, or white, with a small proportion that have a greenish tinge. Maturity, medium, or earlier than most big boll varieties. Lint, short to medium. The plants are prolific for a big boll variety. In plot tests at Auburn Culpepper ranked about midway from top to bottom of list.

Cummings.—This is a local name in the eastern part of Alabama for a variety once quite popular and regarded as productive. It is now little grown or entirely extinct in its pure form. It is said to have been especially subject to boll rot, which is assigned as the cause of its disappearance. As grown at Auburn the plant was of medium height, and of semi-cluster or nearly semi-cluster type. The bolls are of medium size, (78 per pound), ovate, abruptly pointed; maturity, early to medium; storm resistance poor; seed fuzzy, medium size, mostly brownish white.

Davis Long Staple.—This is a long staple, rather short jointed variety. The plants are rather prolific; the staple long and fine; ma-

turity, almost as early as any of the long staples; bolls small and tapering.

Dearing.—(Synonyms, Dearing Prolific and Dearing Small Seed.)

A variety apparently but little grown now. As grown at Auburn this was rather an unpromising variety of uncertain classification. Some plants were of the sem-cluster form and other were somewhat similar to Peterkin. Seed, small, fuzzy, brownish. Per cent. of lint only 31.5, although it is stated that once this variety had a high per cent of lint. Lint, short to medium. Maturity, medium.

Defiance.—(Synonym, Drake Defiance, and probably World's Wonder.)

Seed obtained from Drake Brothers, Philomath, Ga., who introduced the variety within the past few years. This is a prolific, semi-cluster, well fruited cotton, with small bolls. The plant is tall, well shaped, with short upper limbs and medium to long base limbs, resembling Woodfin and Hardin. The bolls are small, 92 average bolls being required in our test to yield one pound of seed cotton. The bolls are ovate, abruptly pointed and more frequently containing five than four locks. The per cent of lint is 34.2; seed small to medium, fuzzy, and mostly brownish white and greenish white. In maturity Defiance is early but not equal to King. The Drake cotton from Alabama has the first right to the name Drake, by reason of priority of use.

Diamond.—(Synonym, Diamond Six Lock). This is a big boli variety with low per cent of lint. Large, brownish, fuzzy seed. The lint is above medium in length; the large, roundish bolls contain mostly five locks and occasionally six locks; maturity, medium to late.

Dickson.—(Synonyms, Dickson Cluster, Dickson Improved, Dixon and Simpson). David Dickson, of Oxford, Ga., whose agricultural writings have so strongly influenced Southern agriculture, originated this variety about 1857 or 1858, by continuous selection from Boyd Prolific. This typical cluster variety was once very popular, but is no longer a general favorite. The plant is slender, erect, with numerous very short fruit limbs and several medium to long base limbs. The bolls are numerous and closely clustered. The small size of bolls (104 per pound of seed cotton) constitutes its greatest fault. The seed are small, fuzzy, mostly brownish white, and occasionally greenish white. The lint is short to medium. Most plants mature early, though not so early as King. The small bolls are ovate to roundish, and often blunt. The per cent of lint is low (32.3.) In 1905, in our variety test, boll rot destroyed more than half the bolls of Dickson, while adjacent varieties suffered only to a medium extent. It was not then possible to determine whether this was due to the use of badly infected seed or to an inherent weakness in the variety. In three field tests at Auburn it ranked near the bottom of the list, and in two tests near the top of the list.

Dixie Wilt Resistant.—(Synonyms, U. S. Dept. Agriculture No. 148 and Orton No. 148). This variety is the result of successful at-

tempts to develop a variety of cotton that should be resistant to cotton wilt, also called "black heart" and "black root." Credit for originating it is due W. A. Orton, of the Bureau of Plant Industry, Department of Agriculture, Washington, D. C., who in 1901 saved seed of plants growing on the farm of M. C. Scott, near Montgomery, Alabama, that were resistant to this disease. The name of the variety from which selections were first made is unknown. Mr. Orton thinks that the Dixie is the result of accidental hybridization between this original selection and other cottons grown with it the following year. Each year it has been grown by him on infested land and seed has been saved from plants that resisted cotton wilt. While more immune than any other variety tested in comparison with it, it is not yet entirely proof against wilt, especially on land badly infested with both wilt and nematodes, or root knot worms. The plants are of medium size, having numerous medium length branches and resembling Peterkin, from which, however, it differs in having a very low per cent of lint. The bolls are small, ovate or roundish, and pointed. There are more frequently five than four locks; storm resistance is medium to good. The per cent of lint averaged 33.1. The seed are small (averaging .107 gram). The seed are variable, the fuzzy brownish seed being those preferred by the originator. Some plants have seed many of which are partially or entirely naked and exactly like Peterkin. Small green or greenish seed also occur. Lint is of medium length. In maturity this plant is medium to late. There is need for improvement in yield of lint, per cent of lint, size of bolls, uniformity of seed, and lower position of first limbs.

Double Header.—Seed were obtained in 1906 from R. H. Smith, Monticello, Ga. This is a promising big boll variety unusually well supplied with limbs and bolls. The leaves resemble Russell in size and shape. The seed also are similar to Russell and Bancroft Herlong, being very large, fuzzy, deep green and brownish green. The bolls are very large, (only 47 being required to make a pound of seed cotton as compared with 62 in the Russell variety). This evidently belongs in the Russell or Bancroft sub-division of the big boll group, but is apparently an improvement on both. The bolls are ovate, tapering and usually contain five locks; the bolls turned down, the seed cotton hanging together and showing medium storm resistance. The parts of the bur curl up. The per cent of lint is medium, 34.1; lint medium length; maturity, medium or medium to late. This variety has not yet been tested by us in such a way as to determine the yield of lint per acre.

Dongola.—(Synonyms, probably Haraldson, Montclare, Rogers and perhaps Lealand). Seed were obtained from B. F. Malabar, Waynesboro, Ga. This is a big boll variety approaching a semi-cluster, and very similar to Montclare and Rogers. The plant is tall with base limbs of medium length and short fruit limbs well supplied with bolls. It is short jointed and rather slender. The bolls are large (63 per pound), roundish, and often blunt. The seed are

large, fuzzy, and mostly brownish white. The per cent. of lint is high for a big boll variety (36). In maturity, Dongola ranks as late. The lint is of medium length.

Doughty.—(Synonym, Doughty Long Staple). We have grown this variety for five years, and have found it badly mixed. Some of the plants have the characteristic long staple form, and others more nearly resemble the big boll and straggling plants. The best type of plants have fiber scarcely long enough to admit this cotton to the long staple class, and on most plants it is plainly short staple fiber. The bolls are medium size (75 per pound), ovate, and long pointed, containing four or five locks. The seed are large, fuzzy, mostly brownish white. The plant is well supplied with bolls, and in maturity ranks as medium to late. In one plot test at Auburn, Doughty ranked tenth in yield of lint.

Doughty Big Boll.—This name has apparently been used incorrectly as a synonym for Doughty.

Dozier.—(Synonyms, Dozier Improved and King). This cotton from North Carolina has plants that resemble the larger specimens of King. In size and character of bolls, seed and lint, and even in the red spots on the petals, we were unable to see any difference between this and King, except that the Dozier cotton was less uniform.

Drake.—(Synonyms, Drake Improved and Drake "Cluster.") This variety is the result of selections made by R. W. Drake, Laneville, Alabama, probably from the Peerless variety. In form of plant most plants clearly belong in the big boll group, while others approach the semi-cluster type. However, the word "cluster" is misleading, for this variety is not even a semi-cluster, though well supplied with bolls. The bolls are large (64 per pound), oval, abruptly pointed and only occasionally bluntish. The seed are large, fuzzy, mostly brownish white and greenish white. Lint of medium length. This variety is entirely different from Drake Defiance.

Drake Defiance.—(See Defiance).

Duncan.—This old variety from Georgia is now nearly or quite extinct. In shape it resembles Jones and other typical big boll varieties. The bolls are large (64 per pound), ovate, or oval, and abruptly pointed or blunt; usually with 5 locks. The per cent of lint is low; the seed are very large, fuzzy, mostly whitish brown and greenish white. In plot tests at Auburn it ranked one year at the bottom of the list and two years about midway of the list in yield per acre. In maturity it is medium to late. Lint medium in length.

Early Gayosa.—(See Gayosa).

Eclipse.—(Synonym, Eclipse Long Staple). This variety grown here in 1902 had all the characteristics of a long staple cotton, except that it was deficient in the length of lint. This may have been due to the very dry summer which that year reduced the length of staple of the most long staple varieties. The bolls and seed are small (93 bolls per pound), the seed fuzzy, and mostly brownish white.

Edgeworth.—(Synonyms, Little and Little Improved). This cotton was introduced by J. C. Little, Louisville, Ga. This variety is

difficult of classification, and is probably best assigned to the intermediate group. The plant is tall and limbs are short to medium. The bolls average medium size (69 per pound), and usually have 5 locks. The seed are fuzzy, small, mostly brownish white and greenish white, resembling King. The per cent of lint is 35.7. This is a well balled plant of early to medium maturity. In the only plot test at Auburn it took low rank in yield of lint per acre.

Ellis.—(Synonym, *Ellis Big Boll*). Seed were obtained from G. B. Ellis, Palmetto, Ga. This is apparently a big boll variety with some plants approaching the long limbed type. The bolls are large (59 per pound), ovate, and abruptly pointed. The seed are large, fuzzy, mostly brownish white and greenish white. The per cent of lint is 32.1.

Eureka.—Seed were obtained from S. L. Thornton, Hartwell, Ga. Apparently this name has been applied to several different kinds of cotton. The per cent of lint of this short staple variety is high (38.6); bolls small (95 per pound), roundish; seed small and fuzzy, mostly brownish white. The variety seems to be intermediate between King and Peterkin.

Excelsior.—The cotton grown at Auburn under this name is the one originated by C. F. Moore, Bennettsville, S. C. The same name according to S. M. Tracy, has been applied to a selection from New Era, made in Georgia. The plant is similar to Peterkin, as also are most of the qualities of seed, except that there are no naked seed. The seed are small, fuzzy, densely covered with a brownish fuzz, but averaging a lighter shade of brown than the seed of Gold Standard. The per cent of lint, which in our first test was 32.8, has steadily risen to 38.1, probably due to careful selection by Mr. Moore. The bolls are small (95 per pound), oval, short, pointed. This is a prolific early to medium variety of the Rio Grande group.

Extra Early.—Seed were obtained from J. B. Crouch, Wedgefield, S. C. The plants were variable, the best being of semi-cluster type, and resembling Woodfin. The bolls are small, oval, mostly blunt. The per cent of lint is above medium. Seed small, fuzzy, brownish white.

Favorite.—Seed were obtained from S. G. Mayfield, Denmark, S. C. The form of plant, high per cent of lint, small size of bolls (78 per pound), small size of seed, and appearance of seed of many plants suggests that that is a strain of Peterkin with practically all the seed fuzzy, and mostly brown. The admixtures somewhat resemble King.

Ferguson.—This was received as a long staple variety, but as grown at Auburn the lint was not long enough to admit this to the long staple class. Occasionally plants were found that were practically lintless, the seed being naked and the boll almost entirely devoid of lint. The bolls are small and pointed (87 per pound). Per cent of lint 31.1; seed brownish white.

Featherstone.—Seed were obtained from J. A. Collins, Jackson, Ga. This is a variety having some plants that are quite or nearly

of the semi-cluster type, and others with longer upper limbs. The base limbs are long and too far from the ground. The bolls are of medium size, ovate, mostly with sharp points. This variety showed considerable storm resistance. Seed of medium size, mostly whitish.

Florodora.—L. A. Stoney, Allendale, S. C., states that this variety was originated by him in 1900, and that the parent varieties were Sea Island and a prolific upland cotton of unknown name. This variety has been very popular in the eastern section of the cotton belt within the past few years. The plant is tall, usually well shaped, and having the characteristic size and shape of the long staple group. The bolls are ovate and pointed and of medium size (averaging 76 per pound), and have either four or five locks. The seed are of medium size, fuzzy, white or brownish white. The per cent of lint, as usual with long staple varieties, is low (31.3). In maturity *Florodora* is late. The staple is long and fine on most plants, and usually commands a considerable premium over ordinary upland. Growers of this variety in this county in 1906 received a premium of 4 to 5 cents per pound, and still higher premiums have been obtained elsewhere. Where the local markets offer no premium, long staple cotton must be shipped to the seaport markets. In our field tests at Auburn, *Florodora*, like other long staple varieties, ranked near the bottom of the list in yield of lint per acre.

Garrard.—(Synonym, probably Hawkins). Seed were obtained from P. R. & W. T. Garrard, Nona, Ga. This is a semi-cluster cotton which in appearance of plant, per cent of lint, medium size of boll, medium size of seed, and appearance of seed was indistinguishable from Hawkins. Seed are mostly brownish white with occasionally a shade of green. The variety is early to medium, and prolific.

Gayosa.—(Synonyms, Early *Gayosa* and *Gayosa* Prize). This cotton of uncertain classification—a part of the plants probably belonging in the Rio Grande, and part in the short limbed groups—was notable in our tests for its low per cent of lint. Bolls are small (71 per pound.) Some of the plants had naked seed like Peterkin.

Gholson.—(Synonym, Allen Long Staple). This is a selection from Allen Long Staple made by L. K. Gholson, Fort Deposit, Alabama. This cotton is similar in all respects to Allen Long Staple, which see.

Gold Dust.—(See King.)

Gold Standard.—Seed were obtained from Excelsior Seed Farm, Bennettsville, S. C. This variety is of doubtful classification, for it contains plants that in turn suggest the semi-cluster, the Rio Grande and the King group. Generally it is a rather compact, erect, almost semi-cluster plant with base limbs of medium length. The bolls are small to medium (77 per pound), mostly roundish. The per cent of lint is high (36.1); maturity, medium. This is a rather prolific variety, the most distinctive feature of which is the deep brown or yellowish brown color of fuzz, which densely covers the seeds of many plants.

Grayson.—(Synonyms, *Grayson* Big Boll, *Grayson* Early Prolif-

ic). Classification doubtful; bolls medium to large; low per cent of lint. Seed are large, mostly brownish white.

Gregg.—This variety is stated to have been originated about 1900 by S. A. Gregg, Florence, S. C., from a single plant found in a garden. The plant somewhat resembles Peterkin, but the fuzzy seed, mostly brownish white and greenish white, make the classification of this variety doubtful. The bolls are of medium size, mostly ovate and pointed. The per cent of lint is high.

Grier.—(Synonyms, Grier's King and King). Seed were obtained from L. F. Grier, Oxford, Alabama. This cotton was identical with King in all respects, including the red spot at the base of each petal.

Griffin.—(Synonym, Griffin Long Staple.) This long staple variety was originated by the late John Griffin, Greenville, Miss., about 1867 as the result of repeated crossing between Sea Island and the Old Green Seed. Selection has been continued each year since then by the originator or by his son. At present selection is being made with a view to fixing the 5-lock quality, while maintaining the length and fineness of fiber. As grown at Auburn, the Griffin plant was not prolific. The lint is longer and finer than that of any other upland variety tested by the writer, but the fiber lacks uniformity of length; even the shortest fibers are full long for the long staple class. The staple is weak, and the outer part of the lock has often a characteristic glossy sheen. Maturity, late; bolls medium to large, and larger than any other long staple (66 being required to make one pound of seed cotton). Locks 4 and 5; per cent of lint, 31.7. Seed mostly brownish white or whitish brown; medium size.

Griffin Drought Proof.—This short staple variety from Georgia, is different from Griffin Long Staple. Per cent of lint low.

Gunn.—Seed were received from C. L. Gunn, Temple, Miss. This is a large plant of the Petit Gulf or long limbed type, though it might equally well be ranked as a large spreading form of the big boll group. The bolls are large (65 per pound), oval, abruptly pointed. The seed are fuzzy, mostly white, but with some mixture of deep green seed. Per cent of lint 32.1.

Hagaman.—Prof. H. J. Webber states that this variety originated near Jackson, La., and was probably a selection from one grown under the name of Dean, though Peeler, which it resembles, was the kind grown almost exclusively on the owner's plantation at the time. The form of plant varies somewhat, and is nearer to the long limbed than to any other group. Bolls small (85 per pound), ovate, pointed; seed small and on some plants brownish white and on others partly naked. Per cent of lint 34.3.

Haralson.—(Synonym, Dongola, which see.)

Hardin.—Originated by B. B. Hardin, Washington, Ga., who exhibited at the Macon Fair in 1906 single limbs almost completely hidden by the thickly clustered open bolls. Receiving no reply to letters addressed to the originator, we secured our seed through a firm in Montgomery, Alabama. As grown here in 1906, Hardin was

a semi-cluster variety very similar to Woodfin and Sterling, but not bearing bolls in dense masses. The bolls were numerous and from medium to small in size (77 per pound of seed cotton), and the per cent of lint 30.3. The small seed are partly white and partly greenish white.

Hawkins.—(Synonyms, Hawkins Improved and Hawkins Jumbo). Originated by W. B. Hawkins, Nona, Ga. This is a standard semi-cluster variety, and the plant is usually prolific and of good shape. The medium to small bolls (79 per pound) are often roundish. The per cent of lint is 34.6. The seed are fuzzy, mostly brownish white and greenish white. Maturity, early to medium; lint, short to medium in length. In plot tests at Auburn it ranked in yield of lint 9th, 16th, 8th, 3rd, 3d, 15th, 8th, and 7th.

Hawkins Jumbo.—(See Hawkins.)

Herlong.—A variety entirely different from Bancroft was tested once. It had small bolls and small seed. (See also Bancroft.)

Herndon.—(Synonym, Herndon Select). This is a selection made by J. A. Herndon, Elberton, Ga., from an accidental stalk resembling the Dickson. The Herndon is almost a semi-cluster variety, with small bolls (85 per pound); small brownish white seed; and early to medium maturity. Per cent of lint 33.1.

Hodge.—(Synonyms, King and probably Dozier). This cotton from North Carolina has medium to small bolls; early maturity; small greenish white and brownish white seed. In form, the plant somewhat resembles the larger plants of King.

Hilliard.—This is a semi-cluster variety very near to the big boll class, with medium to large bolls (69 per pound); per cent of lint, 34.6; rather broad semi-cluster form of plant; medium size of seed, fuzzy, and chiefly brownish white. Maturity early to medium.

Holloway Storm Proof.—(Synonyms, Storm Proof and probably Rowden). A big boll large seed variety.

Hunnicut.—(Synonym, Hunnicutt Choice). This is a variety originated by the late Dr. J. B. Hunnicutt, of Georgia, who several years ago wrote me that he believed the variety then to be extinct. This was a variety with medium to long limbs; bolls medium size, fuzzy, roundish, brownish white seed.

Hunnicut Big Boll.—(Synonyms, probably Russell and Bancroft). The plants are similar to Russell. This cotton has recently been selected by J. A. Hunnicutt, Warsaw, Alabama. The bolls are very large, the seed large, fuzzy, brownish green and deep green, exactly resembling Russell, from which it is probably a selection. The per cent of lint is low and maturity late.

Hutchinson.—This big boll variety was obtained from J. N. Hutchinson, Salem, Ala. The bolls are large, ovate, abruptly pointed, showing considerable storm resistance. The seed are fuzzy, medium size, mostly brownish white with some greenish white.

Improved Long Staple.—This is in the long staple group with small bolls, fuzzy, brownish white medium sized seed.

Jumbo.—(Synonym, Hawkins.)

Jackson.—(Synonyms, African and Limbless.)

This variety, which a few years ago was largely exploited, is a tall, cluster cotton, resembling Welborn Pet, but having larger bolls, and lint adhering to the burs more firmly. The bolls are mostly borne in clusters near the main stem. There are usually one or two medium to long base limbs, but these are sometimes wanting and sometimes more numerous. The bolls are small, (82 per pound), ovate, tapering. Per cent of lint high, (38); seed fuzzy, small, mostly brownish white. At Auburn it ranked in yield of lint 1st, 3rd and 17th. This is a productive variety but with serious faults of form, height, tendency to shed and difficult of picking.

Jackson Wilt Resistant.—(Synonym, U. S. Dept. of Agriculture, No. 128.)

This is the result of selections made since 1900 by W. A. Orton, of the U. S. Department of Agriculture, from plants of the Jackson variety that withstood cotton wilt. It is resistant but not entirely immune.

Japan.—This big boll variety with large, fuzzy, white seed was obtained from a Texas seed firm and is probably a local name for some better known Texas variety.

Johnson.—(Synonym, Johnson Excelsior.)

This cotton is wanting in uniformity of type, containing plants resembling Peterkin, others like the big boll group, and some of semi-cluster form. The bolls are small, 81 per pound; the per cent. of lint high, (37.7); the seed small, fuzzy, and varying in color from pure white to a yellowish brown.

Jones.—(Synonyms, Jones Improved, Jones Re-Improved, and Schley.)

This is a standard big boll variety originated by J. F. Jones, Hogansville, Ga., probably from Duncan. The bolls are large, requiring 62 bolls per pound of lint. The bolls are pointed; the large seed are mostly white, also brownish and greenish white. Per cent. of lint, low. Maturity late. In seven years' tests at Auburn it was usually below the middle of the list and never higher than fifth in yield of lint.

Jones Long Staple.—This long staple is described as having a large, straggling, non-prolific, late plant, with large tapering bolls, large, fuzzy, brownish white seed. Staple long; per cent of lint very low.

Keith.—Tested at Auburn prior to 1894 and reported in Bulletins Nos. 33 and 56 as a prolific, short limbed, and apparently semi-cluster variety, with roundish bolls of medium size; seed of medium size, fuzzy, white or brownish white; maturity early; per cent. of lint, low; staple short.

Keno.—This is a selection made from Colthorp Eureka about 1895 by Colthorp & Co., Talla Bena, La. In form of plant and silkiness of staple it probably belongs in the long staple group, but as grown at Auburn the lint was of scant length for long staple. Bolls are

very small, (104 per pound); per cent. of lint, (32.4); seed fuzzy, small, mostly brownish white.

King.—(Synonyms, King Improved, Gold Dust, Tennessee Gold Dust, King No. 2, King No. 3, Grier, Mascot, Hodge, Dozier, etc.)

This very distinct variety was originated in Louisburg, N. C., by T. J. King, about 1882-4, from several plants selected by him as superior to the parent varieties, which latter he declines to name. The King in form of plant is taken as a distinct group, with plants characterized by small size, short base limbs, numerous medium length upper limbs, the longest of which are sometimes crooked, the growth reminding one of the limbs of a black jack oak (*Quercus Marylandica*.) On part of the blooms there is a red spot inside the flower and near the base of each petal. The most valuable quality of this variety is its extremely early maturity. We have found no other so early. This makes it a favorite in regions where the boll weevil is present. Its popularity on this account is somewhat offset by the small size of bolls and by the shortness of staple. The per cent. of lint is high, almost equalling the Peterkin group. The seed are small, fuzzy, mostly greenish white and brownish green. The bolls are roundish or ovate, sometimes blunt. The seed cotton falls out easily. Occasional plants are found of large size, but in other respects these retain the characteristics of the King variety. In 8 years' plot tests at Auburn it was usually about the middle of the list and never above fifth in yield of lint per acre.

Layton.—A selection made by R. D. Layton, St. Matthews, S. C., from a mixed cotton. In form of plant, high per cent. of lint, (39), medium to small size of bolls, (76 per pound), and small size of seed, this variety belongs in the Rio Grande group, but it differs from Peterkin in that practically all of the seed are fuzzy. Most of them are brown or brownish white, some greenish white, the darker seed resembling the fuzzy seed occurring in the Peterkin variety. Like Peterkin, Layton has but slight storm resistance. There are usually five locks. Layton is medium in maturity and has proved at Auburn one of the most productive of the Rio Grande group, ranking in yield of lint per acre, second, fifth and second, among all varieties tested in plots in 1904, 1905, and 1906, respectively.

Langford.—Seed from S. J. Langford, Albin, Ga. This is a big boll variety. The plants are short jointed and approach the semi-cluster form, and are medium in maturity. The seed are fuzzy and small to medium; per cent. of lint 35.1. Bolls, 63 per pound.

Lealand.—Seed from H. P. Jones, Herndon, Ga.

This is a semi-cluster variety with roundish, mostly blunt bolls, above medium size, (70 per pound.) The seed are large, fuzzy, mostly brownish white and greenish white, but in some plants resembling Bancroft. In maturity Lealand is medium; per cent. of lint, 33.6. Although the plants are of pleasing shape and fairly well balled, yet in a single test here Lealand ranked at the bottom of the list in yield of lint per acre.

Lee.—Seed from E. E. Lee, Wildwood, Alabama. This is probably

a local name. It represents a big boll variety with ovate, pointed bolls; large, fuzzy, brownish white and greenish white seed.

Lewis.—(Synonyms, Prize, Lewis Prize.)

W. B. F. Lewis, Lewiston, La., states that he originated this variety. This is a plant of the erect, short-limbed type, with few short base limbs, or none, and characterized by some plants having near the base crooked fruit limbs, curving downward and bearing four, five, or more bolls. The photograph represents a plant of this type without base limbs. The bolls are medium to small, (78 per pound), ovate or roundish, pointed. The seed are fuzzy, small, mostly brownish white, and greenish white, the brownish seed resembling those of *Layton*. The per cent. of lint is 35.8. The fibre is rather short. In a single plot test at Auburn it stood just above the middle of the list in yield of lint per acre.

Limbless.—(See Jackson.)

Little.—(See Edgeworth.)

Laclede.—(See Colthorp.)

Louisiana.—This cotton from Louisiana is a large, straggling, long limbed plant with small bolls. It is a late variety and probably belongs in the *Petit Gulf* group.

Lowry.—Seed originally from J. G. Lowry, Cartersville, Ga. This is an early variety similar to *King*. The bolls are small, (79 per pound); the seed are medium size, mostly greenish white and brownish white. Per cent. of lint 33.1.

Maddox.—Seed obtained from J. S. Maddox, Orchard Hill, Ga. This is a big boll variety with fuzzy seed, some of which are greenish white and some brownish, the latter with only a scant covering of fuzz. It has large, ovate, pointed bolls, (63 per pound), large seed, per cent. of lint 34.9; maturity medium.

Mascot.—In all respects this proved identical with *King*, which see.

Matthews.—(Synonym, *Matthews Long Staple*.) This Mississippi variety, now nearly or quite extinct, is nearer to the big boll than to the long staple class. The lint is too short and the bolls too large for the long staple group. The bolls average 67 to one pound of seed cotton. The seed are large, fuzzy, white; maturity medium. Per cent. of lint 31.4.

Mattis.—Seed from C. F. Mattis, Learned, Miss. The plant was similar to *Peterkin*, but perhaps larger. The bolls are medium in size, (77 per pound), oval, pointed, with slight storm resistance; maturity medium; seed are small, black and naked. This seems to be a rank growing form of *Peterkin* with lower per cent. of lint, (32.4.)

Parker.—This cotton was originated by John M. Parker, Sr., in Bolivar County, Miss., about 1868. This belongs in the *Rio Grande* group as judged by form of plant, size of boll and size of seed. It differs from *Peterkin* in having somewhat more fuzz on the dark brown to brownish white seed, and in having a lower per cent of lint, 33.1. The bolls are small to medium, (75 per pound), ovate, and slightly pointed. The seed are small to medium; maturity medium.

At Auburn, Parker was less productive than Peterkin and had slightly longer limbs.

Mebane.—(Synonyms, Mebane's Triumph; Triumph, which see.)

Meredith.—(Synonym, Meredith Big Boll.)

Seed from J. C. Meredith, Jenkins, Ga. This variety can probably be classed as belonging to the intermediate group. The plant has one to three short base limbs, is medium to tall, and has ovate, pointed, medium sized bolls, (72 per pound). The seed are medium sized, mostly brownish white and greenish white. The per cent. of lint is 32.8; maturity medium. In a single plot test at Auburn it stood near the bottom of the list in yield.

McCall.—This is a semi-cluster variety of no conspicuous merit from South Carolina. The bolls are of medium size, (71 making a pound of seed cotton), ovate or roundish, and pointed. The per cent. of lint is 34.4; the seed are of medium size, fuzzy, mostly brownish white.

Minor.—Seed from J. J. Minor, Toombsboro, Ga. This is a semi-cluster variety, with rather long upper limbs for this group. The bolls are of medium size, (74 per pound of seed cotton), the per cent. of lint 34.4; seed of medium size, fuzzy, brownish white, brownish, and greenish. Maturity medium to late.

Missionary.—(Synonym, probably King, which see.)

The plants, though lacking in uniformity, resemble the larger plants of King and other qualities also accord with those of King.

Mitchell.—(Synonyms, Mitchell Twin Boll and Clark Prolific.)

H. B. Mitchell, Athens, Ga., states that he originated this variety about 1895. The classification of this variety is uncertain. Bolls are medium to small, (79 per pound); the seed medium in size, fuzzy, brownish white and brown.

Montclare.—E. M. Williamson, Montclare, S. C., states that this variety was originated by him about 1891, probably as a selection from Jones Big Boll. This rather promising variety belongs both in the big boll and in the semi-cluster groups, and closely resembles Dongola and Rodgers. The bolls are large, (65 per pound); roundish, often blunt, and usually contain five locks. The per cent. of lint is high for a big boll variety, averaging 36.8. Maturity, late.

Moon.—(Synonym, Moon Long Staple.) In form of plant this variety from Arkansas resembles most long staple varieties. In our test the length of lint was not quite sufficient to place this in the long staple group. The bolls are small, (83 per pound), the seed small to medium, fuzzy and white. Per cent. of lint 32.7.

Moss.—(Synonyms, Moss Improved, Peterkin, etc.)

This is a selection from Peterkin made since 1887 by B. D. Moss, Norway, S. C. This cotton could not be distinguished from Peterkin in size and appearance of seed, bolls and plants.

Mortgage Lifter.—It required 58 bolls of this big boll variety to make one pound of seed cotton. The bolls are ovate to roundish, and pointed. The seed are large, fuzzy, mostly white, with some brown-

ish white and some greenish white. The per cent. of lint is 34.4; maturity, late; lint, medium to long.

Nancy Hanks.—This cotton, which lacks uniformity, is of doubtful classification. Some plants resemble the short limbed group, others the big boll group. The bolls are small; seed mostly fuzzy, and brownish white; per cent. of lint, 35.6.

New Century.—The form of plant resembles the long staple group, but the lint, though long for a short staple, was on our dry soil, too short for a long staple. The bolls are small to medium, ovate pointed, with usually 4 locks. The seed are medium to large, white and brownish white. Per cent. of lint medium; maturity medium to late.

Nonpariel.—(Synonyms, Woodfin, Woodfin Nonpariel, Sam Woodfin Prolific. See Woodfin.)

Norris.—Seed from H. H. Steiner, Grove Town, Ga. This is a semi-cluster variety with small bolls and a very low per cent. of lint. Seed are large and mostly brown and greenish brown. Maturity, medium to late.

Okra.—(Synonyms, Okra Leaf, Forked Leaf.) Now probably extinct. It is characterized by leaves having very narrow lobes, thus making the foliage surface relatively small. Limbs, long; length, between joints, medium; bolls small and tapering; seed of medium size, fuzzy, white; staple short; "Prolific for a long limbed variety."

Orton.—Nos. 128, 145, 149. (See U. S. Department of Agriculture.)

Orton.—No. 148. (See Dixie Wilt-Resistant.)

Ozier Long Staple.—(Synonyms, Ozier, Ozier Silk, Ozier Starnes, Tennessees Silk, Bob Silk, Bob White, Bob.)

Seed from J. D. Ozier, Corinth, Miss. This is a rather prolific variety of the long staple class. The bolls are small, ovate, and long pointed, with 4 locks. The staple is long and fine, but shorter than that of Allen Long Staple. Seed small to medium, fuzzy, white and brownish white; per cent lint low. Maturity medium.

Ozier Big Boll.—Seed from J. D. Ozier, Corinth, Miss. The seed received under this name produced somewhat variable offsprings, most plants belonging in the big boll group, with roundish bolls, often blunt, and usually five locks. Seed fuzzy, large, mostly white, brownish white and green. Per cent. of lint medium; maturity, late.

Parks Own.—Seed from G. F. Parks, Alexander City, Alabama. A local name given to a strain of fuzzy seeded Peterkin, that is no longer kept distinct.

Peeler.—Described in Alabama Experiment Station Bulletins Nos. 33 and 56 as a large, straggling, non-prolific, late variety, with long, drooping; long jointed limbs; medium to large, tapering bolls; seed large, fuzzy, brownish; per cent of lint, low.

Peerless.—(Synonyms, Crawford Premium, Crawford, etc.) This variety, once popular, is now rarely grown. This variety belongs in the semi-cluster group. The bolls are of medium size, ovate, abruptly pointed, with slight storm resistance. Seed are fuzzy, large, and

variable in color, mostly a brownish white. Per cent of lint, 33.4; maturity, medium.

Petit Gulf.—This very old variety, now probably almost or quite extinct, belongs in the long limbed group. The plant is large, straggling, long jointed, with slender limbs, often turning downward from the weight of bolls. As we grew it in 1899 and 1903, probably in mixed condition, the variety was practically worthless. The bolls are small, mostly ovate, and either abruptly pointed or obtuse, having both 4 and 5 locks. The seeds are of medium size, mostly fuzzy, greenish and whitish brown. Some of the small fuzzy seed are green. Maturity, late; lint, long for a short staple; per cent lint, 31.8.

Peterkin.—(Synonyms, Audrey Peterkin, Brazier Peterkin, Crossland, Carolina Queen, Moss Peterkin Limb Cluster, Texas Wood, Wise, etc.) This widely grown variety was originated by J. A. Peterkin Fort Motte, S. C., about 1870. As the result of continued selection by the originator, it is now one of the most uniform of all varieties. Plants are of medium to large size, abundantly supplied with branches, which are usually straight; base limbs numerous, and short to medium in length; upper limbs medium to long. The bolls are of medium size (averaging 76 per pound of seed cotton), ovate, pointed, opening wide, usually with five locks, which rather easily fall out. Maturity medium. The seed are small, more than half of them naked and black, except for a tuft of fuzz at the smaller end. The other seed are scantily covered with brownish fuzz. This variety is characterized by a rather high per cent of lint. Lint is above medium in length. In ten years in plot tests at Auburn it occupied respectively the following positions in yield of lint per acre: 2nd, 5th, 1st, 7th, 8th, 3d, 4th, 1st, 12th and 6th. No variety tested for so long a period has proved more productive, though some newer varieties tested only a few years are slightly ahead for those few years.

Pinkerton.—Seed from H. R. Pinkerton, Eatonton, Ga. This variety was lacking in uniformity of seed, but seems nearest to the Rio Grande group. Maturity, medium. Bolls, small, (79 per pound); seed small; per cent of lint, 36.2.

Pride of Georgia.—(Synonym, Malier Prolific). Seed from J. H. Malier, Sunny South, Ga. This Georgia variety is said to have originated about 1895. It is of doubtful classification, the plants lacking uniformity, some having the semi-cluster form. The bolls, which are ovate, and pointed, vary from large to medium. The seed are small to medium, fuzzy and mostly brownish white and greenish white. Maturity, medium. Per cent lint, 34.7.

Prize.—(See Lewis.)

Ptomey.—(Synonyms, Champion, Peterkin, etc.) This is doubtless a local name in one neighborhood in Alabama for Peterkin, which it resembles in all respects.

Pullnot.—Seed from J. E. Bradberry, Athens, Ga. This is a semi-cluster variety. The bolls are of medium size, or above, (71 per

pound of seed cotton), ovate or roundish, and often blunt, with either 4 or 5 locks. It has but slight storm resistance. The seed are of medium size, averaging .12 of a gram, fuzzy, brownish white and brown, with a few deep green seed. This is a very promising prolific variety of medium to late maturity. In three plot tests at Auburn it ranked 8th, 5th, and 4th, or always in the upper quarter of the list in yield of lint per acre. The per cent of lint is high, (36.3).

Purple Leaf.—(See Red Leaf and J. C. Cook).

Rameses.—An old variety no longer grown. Apparently it was a semi-cluster variety, resembling Peerless. It is described in Bulletins Nos. 33 and 56 of this Station as having long base limbs; upper limbs long but short jointed; plant prolific and early; bolls roundish and of medium size; seed medium, brownish white; staple short.

Red Leaf.—(Synonyms, Willett Red Leaf, Willett Purple Leaf). Seed from N. L. Willett Seed Co., Augusta, Ga. This is a unique variety, leaves, stems, squares and bolls being a deep purple. The new blooms are pink instead of white. The plant is large and very ornamental. In shape it is somewhat like a large, long-limbed, long staple variety. The base limbs are numerous, usually 3 to 5, long and growing more nearly upright than in most varieties. It has been claimed that this variety is exempt from cotton rust and some other diseases. At Auburn it has been slightly attacked by rust, but is apparently somewhat more resistant to this disease than most varieties, and retains the leaves better under adverse conditions. In maturity it is late to very late. Storm resistance, slight. The bolls are of medium size (73 per pound of seed cotton), roundish, short pointed, with either 4 or 5 locks. Per cent of lint high (36.8); lint medium or above medium in length. The seed are small, fuzzy, brownish white, due to the black color of seed coat showing faintly through the rather scanty covering of white fuzz. The plant is rather long jointed and not very prolific in proportion to size. In three plot tests at Auburn it ranked in yield of lint per acre, 12th, 9th, and 11th. In color of foliage this plant resembles a cotton grown at the Alabama Experiment Station in the early '90's, under the name of J. C. Cook, (which see).

Reliable.—Seed from E. S. Rakestraw, LaGrange, Ga. This is a big boll cotton, resembling Truitt in size of bolls, which are large and pointed, in form of plant, which varies between typical big boll and the semi-cluster form; and in appearance of seed, which are whitish brown and greenish brown. In a single test, the seed were medium to large or a little smaller than seed of Truitt. Maturity late. Per cent lint, 33.

Rich Man's Pride.—Seed from E. W. Bond, Athens, Ga. Classification uncertain, plants having few base limbs of medium length, few short upper limbs; bolls above medium size, ovate, pointed; medium maturity, fuzzy seed, mostly brownish and greenish. Per cent of lint, high.

Roby.—Seed from J. E. Roby, Goodman, Miss. This variety seems to be intermediate between the big boll and the long limbed group. In a single test at Auburn it was considered promising on account of prolificacy, high per cent of lint, and rather large bolls, (66 per pound of seed cotton). The plants are large, abundantly supplied with limbs and bolls; both lower and upper limbs are long. Seed fuzzy, medium size, very variable in color, from brownish white to deep brown, with an occasional deep green seed.

Rogers.—Originated about 1890 by R. H. Rogers, Darlington, S. C., as the result of crosses between (1) Jones Improved, (2) a small balled, storm-resistant, "cluster" form of Herlong, and (3) Jowers, the latter a small round boll, very prolific cotton. This variety belongs both in the big boll and the semi-cluster groups, and resembles Dongola and Montclare. The bolls are large (62 per pound of seed cotton), decidedly storm resistant, and have 5 and 4 locks, not opening wide. The bolls are roundish, pointed or blunt. The seed are large, brownish white, and greenish. Per cent of lint above medium; maturity, medium to late.

Rosser No. 1.—This variety of uncertain classification is apparently intermediate between the King and the big boll group. It has medium sized, ovate, pointed, bolls; seed mostly brownish, fuzzy, and small. In prolificacy, maturity, and storm resistance, it is medium. Per cent of lint is above medium.

Rowden.—This variety, which originated in Texas, belongs in the big boll group (60 bolls making one pound of seed cotton). The bolls are ovate, pointed, relatively storm resistant, the locks, mostly 5, hanging together in a compact mass, making picking easy. Per cent of lint above medium; maturity medium; lint, medium length. This variety has many valuable qualities, but has the weakness of having a small number of bolls, and an insufficient number of limbs. In a single field test at Auburn it stood 5th in yield of lint among 40 varieties tested. It is one of the favorite varieties in the boll weevil region of Texas.

Ruralist.—This variety was originated a few years ago by J. F. Merriam, Battle Creek, Ga. This is a big boll variety averaging in two years' tests 64 bolls per pound of seed cotton. The bolls are ovate, pointed, opening well; the per cent of lint is low; the seed are of medium size, mostly brownish white, brown and green. Maturity, medium.

Russell.—(Synonym, probably Bancroft.) This variety was originated about 1897 by J. L. Russell, Alexander City, Alabama, from a single chance plant of unusually thrifty growth and having very large bolls, found in his field. It has become a wide favorite, and probably divides the honors with Peterkin and Truitt of being the variety most extensively grown in Alabama at present. The plants are of medium size, having two to four base limbs of medium length, upper limbs of short to medium length. The leaves are characterized by large size and shallow indentations between the lobes. The bolls are large (averaging 62 per pound of seed cotton), long, ovate, tapering gradually to a point, opening well, and easily picked. The

per cent of lint is below medium (32.9). The seed are large, densely covered with fuzz, either green or greenish brown. In maturity, Russell is late. In field tests at Auburn its rank in yield of lint per acre was 1st, 8th, 20th, 6th, and 15th, averaging about midway of the list for the years when it was tested. It stood ahead of Truitt three years and was beaten by Truitt two years. In all points, including characters of plants, foliage, seed, and yield, Russell and Bancroft Herlong have been practically identical. While no historical or documentary evidence has been found bearing on the point, my opinion is that Russell and Bancroft are identical, the Russell probably being a selection from a chance plant of Bancroft, found in Mr. Russell's field. This view is supported by the similarity in all points and by the further fact that, excepting a few strains exploited within the past few years, no other varieties have been found having the unique seed characters common to Bancroft Herlong and Russell.

Rust Proof.—Noted in Alabama Experiment Station Bulletin No. 56 as having large bolls, low per cent of lint. No longer obtainable under this name.

Sam Woodfin Prolific.—A selection from Woodfin and identical with the parent variety.

Seabrook.—This is a variety of Sea Island cotton (see above) originated by F. P. Seabrook, James Island, S. C. Among Sea Island cottons it is classed as a medium grade of staple and hard to gin on the gins commonly employed for that class of cotton, on account of some green fuzz on the seed. It is regarded as productive for this class of cotton, and better suited than most Sea Island strains for cultivation in the interior. The seed, averaging .11 gram and 26 per boll, are mostly naked and black, except for a tuft of greenish brown fuzz at each end of the seed. The per cent of lint was 28.1; bolls per pound of seed cotton 112. It did not mature its entire crop at Auburn.

Sea Island.—This belongs in a different species from the short staple and long staple upland varieties, being classed by botanists as *Gossypium barbadense*. The plants are very large and have long slender limbs; stems and leaves are free from hairiness. The bolls are very small and slender, tapering gradually to a sharp point; surface of bolls pitted. The leaves are entirely unlike those of short staple and long staple upland varieties, the lobes (usually 5) being separated by deep indentations. At Auburn the Sea Island matures only a small portion of its forms. The young bloom is cream colored instead of white, and has a red spot inside the flower, near the base of each petal. The per cent of lint is very low, averaging at Auburn 26.5; it required 127 bolls to make one pound of seed cotton. The seed, which are naked and black, were of large size (.13 gram), and the average was only 21 seed per boll. Lint very long, fine and silky.

Scogin.—(Synonym, Culpepper, which see). A selection made by

J. F. Scogin, Luthersville, Ga., from Culpepper, from which it cannot be distinguished.

Sewell.—A local name for a big boll, unprolific, large-seed variety with low per cent of lint. Seed mostly brownish white.

Shine.—(Synonyms, Shine Early, Shine No. 1, etc.) Originated by J. A. Shine, Faison, N. C., about 1875, who states that it is descended from Sea Island and from a little known variety called Micasucie. This is an early variety, but not quite so early nor so uniform as King. Some of the plants are of the short limbed type and some of them resemble King. This variety is inferior to King in per cent of lint (averaging only 32 per cent), and in two tests at Auburn, in which it was compared with King, the yield of lint was lower. Storm resistance, poor; bolls small (90 per pound); seed small, fuzzy, brownish white and greenish.

Shine No. 2.—This cotton, of variable type and uncertain classification, was originated by J. A. Shine about 1900, who states that its parent was Texas Bur.

Shine Black Seed.—(Synonyms, Hood and probably Peterkin.) This cotton is evidently a selection from Peterkin, which it resembles in all points.

Schley.—This is a selection from Jones Improved made by the Georgia Experiment Station. In one of our tests it exceeded and in another test fell below its parent in yield of lint per acre. It belongs to the big boll class, and is perhaps a little more erect and compact than its parent. The selection has increased the per cent of lint (34.1) and slightly decreased the size of seed, has made maturity earlier, and the form of plant more compact.

Simms.—(Synonym, Simms Long Staple). Seed obtained from J. F. Weekley, Wheeler, S. C. This long staple variety had bolls of medium sized, medium sized seed, mostly fuzzy and brownish. The plants were not productive. Maturity, medium to late.

Sistrunk.—This is a selection made by W. E. Sistrunk, Tallassee, Ala., beginning at a time when he was growing both Crossland and Hawkins varieties. As grown in 1905 it had not become entirely uniform, but the majority of plants had the Rio Grande characteristics, being evidently mostly selections from Crossland. The bolls are of medium size (72 per pound); per cent of lint high (36.7); seed small (.098 gram), mostly with a scant covering of a brownish fuzz. Plants prolific, and of medium to late maturity.

Smith Improved.—Seed from A. J. Smith, Conyers, Ga. This is a big boll variety with large fuzzy seed, which are brownish white and greenish white.

Smith Standard.—(Synonyms, Ben Smith, and Smith Choice, Bush). A big boll variety with large fuzzy seed and medium per cent of lint, medium maturity.

Southern Hope.—Seed from Marx Schaefer, Yazoo City, Miss. In shape of plant this is a typical long staple. The bolls are medium size, ovate, pointed. The staple is short for the long staple group. Per cent of lint is 30.6. Bolls medium size, 78 making a pound of

seed cotton; seed small to medium, fuzzy, white and brownish white; maturity medium.

Southern Wonder.—Seed from L. F. Grier, Oxford, Alabama. This is a big boll variety (52 bolls per pound), with medium per cent of lint, large, fuzzy, brownish white, brown, and green seed. It is moderately prolific and of medium to late maturity.

Spearman.—(Synonym, Spearman's Choice). Seed from W. B. Spearman, Social Circle, Ga. This is a big boll variety of medium maturity; plants compact and moderately prolific, approaching the semi-cluster form. The bolls are large (56 per pound), roundish, often blunt pointed. The seed are smaller than those of most big boll varieties, averaging .106 gram. The seed are fuzzy, mostly brownish white. The per cent of lint is low (31.7).

Speight.—Seed from J. B. Speight, Winterville, N. C. Classification uncertain, but probably it represents a form of the Rio Grande group; plants prolific, well shaped and suggesting Peterkin; bolls small, ovate; seed small, variable, either fuzzy, brownish white, greenish, or brown or nearly naked. Per cent of lint 33.7, or very low for the Rio Grande group.

Spruiell.—(Synonyms, Spruiell Re-Improved, Spruiell Green Seed, Spruiell Prolific). Originated by A. M. Spruiell, Leeds, Alabama, as a selection from Hutchinson. We have grown this cotton from the originator for several years under each of the above names, and have found the strains to be practically the same, the differences between the different strains being less than the differences between the individual plants of the same strain. This seems to be an intermediate between the big boll group and the King group. The bolls are above medium size (61 to 72 per pound, averaging 67 for the three strains), ovate, pointed. In maturity it is early to medium, or earlier than most varieties with bolls of this size. Further improvement in the matter of uniformity is needed. Seed, medium to large, fuzzy, whitish brown, greenish brown, brown and green.

Sterling.—Seed from L. W. Dance, Eatonton, Ga. This is a prolific semi-cluster cotton of early to medium maturity. It resembles Woodfin and the more compact, erect, plants of Hawkins. Bolls small (93 per pound), ovate, sometimes obtuse, seed small, mostly brownish white. Lint short to medium in length; per cent of lint, medium.

Storm Proof.—(See Texas Storm Proof.)

Strickland.—Originated by J. R. Strickland, Gordo, Ala. This is a big boll variety, with plants typical of that group. The bolls are large, (58 per pound), ovate, usually blunt-pointed. The per cent. of lint is low, (32.5). The seed are large, fuzzy, mostly brownish white. Lint above medium. In two plot tests at Auburn, Strickland ranked 7th and 11th in yield of lint per acre. This variety very closely resembles Truitt.

Sunflower.—Seed from Marx Schaefer, Yazoo City, Miss. This is a long staple variety with plants, bolls and fibres typical of that group. The bolls are small, (83 per pound of seed cotton), slender,

tapering to a sharp point and having either 4 or 5 locks. The plant is prolific for a long staple variety. Storm resistance medium. Seed small to medium, white and brownish white. Maturity medium to late. Fiber long; per cent. of lint, low, (29.2).

Like the other long staple varieties it has stood near the bottom of the list in yield per acre of lint at Auburn, about equalling *Florodora*.

Tatum.—(Synonym, *Tatum Big Boll*.) Seed from R. D. Tatum, Palmetto, Ga. The plants are well shaped and characteristic of the big boll group. Bolls large, (58 per pound), abruptly pointed. Per cent. of lint, 33.2; seed, large, fuzzy, brownish white and greenish white. Maturity, late. This variety resembles *Strickland*, but has a larger per cent of greenish seed, which average smaller.

Texas Bur.—Originated by C. E. Smith, Locust, Grove, Ga., by selections since 1895 from an unknown variety originally from Texas. This is a big boll variety, with rather few medium length limbs, and medium maturity. Per cent. of lint, low. Seed of medium size, fuzzy, mostly brownish white, but with some greenish seed. In two plot tests at Auburn it ranked in yield of lint per acre about one-third the distance from the top of the list. On account of its apparent earliness for a big boll variety this cotton is worthy of preservation and improvement through an increase in the number of limbs and bolls.

Texas Oak.—(See *Peterkin*.) A variety of the Rio Grande class and identical with *Peterkin*, but having a lower per cent of lint, (34.2.)

Texas Storm Proof.—(Synonyms, *Bahama*, *Drought Proof*, *Storm Proof*.) A big boll variety with medium per cent of lint; very large, fuzzy seed, (.16 gram), mostly brownish white. Some of the seed obtained under this name contained nearly or quite naked, black seed like *Peterkin*. Bolls very large, pointed; storm resistance considerable; maturity, late.

Texas Wood.—This is similar in all respects to *Peterkin*, which see.

Thrash.—See *Wyche*.

Todd.—(Synonym, *Todd Improved*.) Seed from P. W. Todd, Grantville, Ga., who states that it originated about 1892 by selection from a field where "storm proof" and two other varieties were planted. This is a typical big boll variety with very large bolls, (51 per pound), bolls ovate, pointed, and usually with five locks. The per cent of lint is medium (33). Seed very large, (.169 gram), fuzzy, mostly whitish brown, but with some greenish seed. Maturity late; fairly prolific.

Todd Early.—Distinct from above; small bolls; classification uncertain.

Toole.—Originated by W. W. Toole, Augusta, Ga., in 1894 as a selection from *Peterkin*. It is probably an intermediate form between the Rio Grande group, and the King group, being much closer to the former. In a few plants were found red spots on pet-

als, pointing to kinship to King. This is a very prolific variety. The plants are of medium size, symmetrical and abundantly supplied with bolls and limbs. The bolls are small (88 averaging in our tests one pound of seed cotton). The bolls are ovate, abruptly pointed, with five or four locks, opening wide and allowing seed cotton to fall out rather easily. The seed are small (only .086 gram), a part of them quite fuzzy and pale brown, but most of them appearing dark brown by reason of the very scant covering of white or brownish fuzz, through which the dark seed coat can be seen indistinctly. The per cent of lint is very high, (averaging 38.5). In maturity Toole is early or early to medium, being later than King and a little earlier than Cook. It has proved more productive than King or Peterkin, standing 1st and 3rd in two field tests at Auburn, or about equal to Cook. Its principal defect is the small size of bolls. Its earliness and productiveness should make it a favorite, especially after the appearance of the boll weevil.

Triumph.—(Synonyms, Mebane, Mebane Triumph). This variety was originated by Mr. ——— Mebane in the southern part of Texas, but our seed were obtained from J. L. & W. B. Myrick, Lott, N. C. This is a big boll variety, with immense bolls, only 46 bolls being required to make a pound of seed cotton. Other conspicuous merits of this variety are the facts that it is earlier than most big boll cottons, ranking as medium in maturity, and that it has a very high per cent of lint, (38.6 in our test). The seed are numerous, of medium size, (averaging .127 of a gram), fuzzy, brownish white and greenish. This cotton is somewhat resistant to storms; lint, of medium length or above. The yield of lint was not determined at Auburn, only a small area of this variety being grown. While not especially well balled here, this variety has enough merit to make it a favorite in case its yield of lint in our 1907 test shall equal that of other leading varieties. This variety has been especially satisfactory in regions infested with the boll weevil.

Truitt.—(Synonyms, Truitt Big Boll, Truitt Premium). This is a popular and widely grown big boll variety, originated by George W. Truitt, LaGrange, Ga., by selection from the so-called "Old Georgia White Seed." The bolls are large (averaging in four years' tests, 58 per pound of seed cotton). The plants are well shaped and more prolific and more nearly approaching the semi-cluster type than do many of the big boll varieties. Bolls are large, ovate, pointed, opening wide, and not storm resistant. Seed large, fuzzy, mostly brownish white to white. Maturity, late, but not quite so late as Russell. This variety has been tested in plot experiments at Auburn for eleven years and ranked in yield of lint in the respective years 1st, 3rd, 2nd, 4th, 2nd, 9th, 5th, 2nd, 24th, 16th, and 14th.

Tucker.—(Synonym, Boyd.) Seed from W. B. Tucker, Opelika, Ala., who selected it from Boyd Prolific. Plants variable, mostly short-limbed; per cent of lint 34.9; bolls small; seed small, fuzzy, brownish white, brown and greenish; maturity, early to medium.

Tyler.—(Synonym, Tyler Limb Cluster). This is a semi-cluster

variety from South Carolina, which is now probably extinct. Bolls small; seed like Peterkin; but per cent of lint only medium.

U. S. Department of Agriculture Nos. 145, 149.—These are selections made on account of wilt resistance by W. A. Orton. They have all been discarded because inferior in this point to Dixie and to U. S. D. A. No. 128, below.

U. S. Department of Agriculture, No. 128.—(Synonym, Jackson Wilt Resistant). A selection from Jackson Limbless made by W. A. Orton since 1890, with a view to increase its resistance to cotton wilt.

Victor.—(Synonyms, Combination, Peterkin, etc., which see). A strain of Peterkin from South Carolina that is abundantly supplied with bolls, the small size of which (89 per pound), makes it inferior to the parent. The seed are very small, brown, mostly fuzzy.

Warren.—Seed received from J. B. Warren, Moscow, Miss. Classification uncertain; not especially promising.

Webb.—This cotton from North Carolina includes two types, one is semi-cluster and one resembles the larger plants of King. Early but otherwise unpromising.

Webber-Russell.—A hybrid made by Dr. H. J. Webber, between Russell and some long staple variety. As tested in 1906 it had most of the characteristics of Russell, but smaller leaves, large, slenderer, and more pointed bolls, many white seed as well as the usual large green seed; fibers of unequal length on the same seed. It would not yet take rank among the long staple varieties. In a single test the yield of lint was slightly above that of Russell.

Welborn.—(Synonym, Welborn Pet.) A cluster variety now difficult to obtain, originated by the late Jeff Welborn, of Texas. Plants of medium height, consisting of a central stem with very short fruit limbs and one to four base limbs of medium length. Plant resembles Jackson, but the bolls are slightly smaller, (91 per pound) and less tapering; bolls ovate, thickly clustered, abruptly pointed. Maturity, early, but later than King. A peculiarity of this variety was the opening of most of its bolls about the same time. Per cent of lint above medium.

Whatley.—A local name in Lee County, Alabama, for a strain that is no longer maintained.

Whitten.—(Synonym, Whitten "Cluster.") A local name in the eastern part of Alabama for a big boll variety that seems to be a selection from Cummings or Peerless. Bolls, large, pointed; seed large, fuzzy; per cent lint, high; the plant resembles the so-called Drake "cluster" from Alabama.

Wilson.—(Synonym, Wilson Matchless). Seed from F. D. Wilson, Littleton, N. C. Classification uncertain. Bolls medium size, ovate, pointed, usually 5-locks; wood or base limbs one to five, of medium length. Per cent of lint low, (32.2). Seed small, fuzzy, brownish white and greenish white. Maturity, medium.

Wise.—(Synonym, Peterkin, etc., which see.)

Seed from H. P. Jones, Herndon, Ga. The plant in all qualities

is not distinguishable from Peterkin, though in five years' tests it averaged 1.1-2 per cent higher in per cent of lint (39.5) and the seed averaged slightly smaller (.087 gram). It is possibly a few days later than Peterkin.

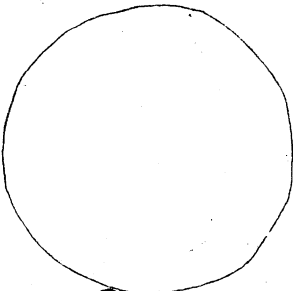
Wonderful.—An old long staple variety no longer obtainable. Described in earlier bulletins of this Station as having a large plant, with long, drooping, long-jointed limbs; bolls large, and pointed, maturity late; staple long; seed large, fuzzy, brownish white.

Woodfin.—(Synonym, Nonpariel.) Originated by S. V. Woodfin, Marion, Alabama, about 1898, who states that the parent varieties were Peerless, Peterkin, and one that he calls Senegambia. This is a well shaped plant of the semi-cluster type. The bolls are small, ovate, pointed, with either five or four locks. Maturity medium, to late; per cent of lint low to medium; seed small, fuzzy, mostly brownish white and greenish. This cotton is identical with Sam Woodfin Prolific and closely resembles Sterling and the most compact plants of Hawkins.

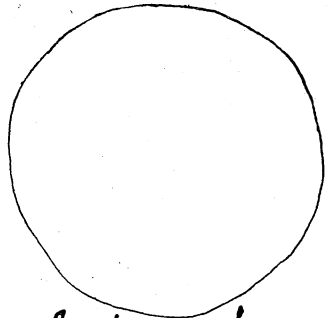
World's Wonder.—(Synonyms, Probably Defiance and Drake's Defiance; see Defiance.)

Wyche.—(Synonyms, Wyche Big Boll, Thrash). Seed received from J. S. Wyche, Wooster, Ga. who states that this variety originated there about 1873. This is a typical big boll variety, 59 bolls making a pound of seed cotton. Per cent of lint medium; bolls ovate, pointed, and with either five or four locks. The seed are large, mostly white or brownish white. Wyche resembles Jones Improved.

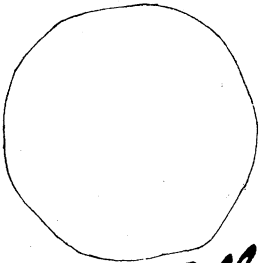
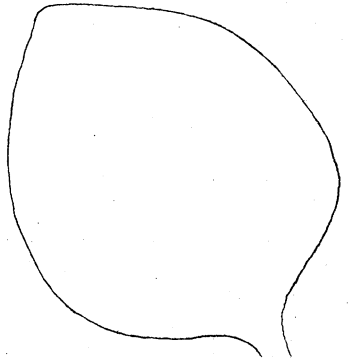
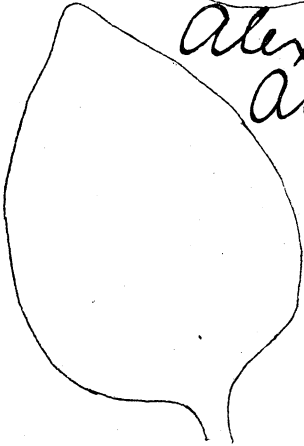
Zellner.—Extinct. Described in Alabama Experiment Station Bulletins Nos. 33 and 56 as having a plant of medium size; bolls roundish, of medium size; early; per cent of lint very low; staple short. This was apparently a semi-cluster variety.



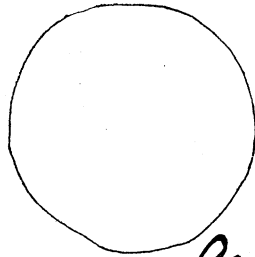
Alex.
Allen



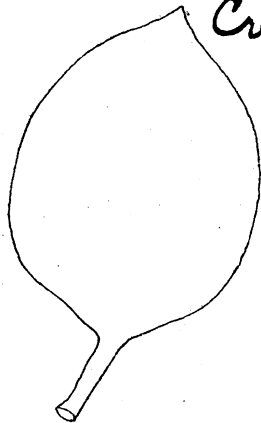
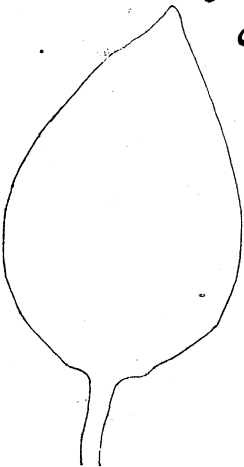
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Prolific

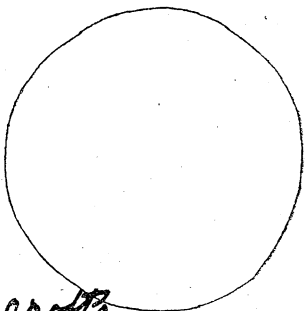


Allen's
L.S.

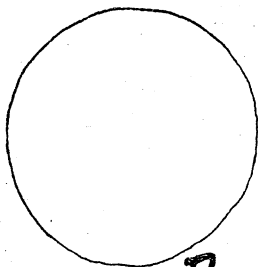


Anson's
Cream

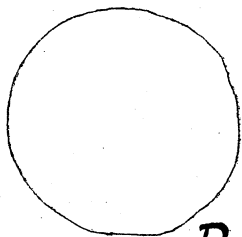
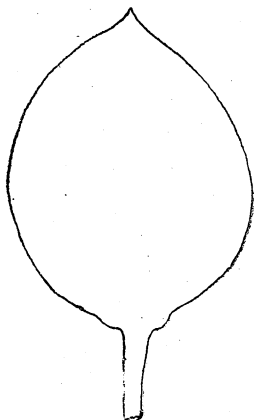
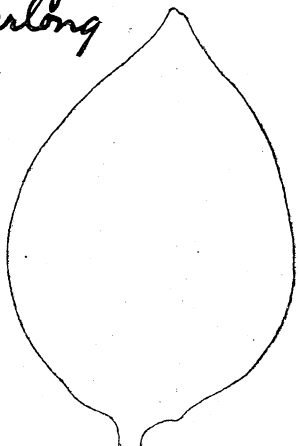




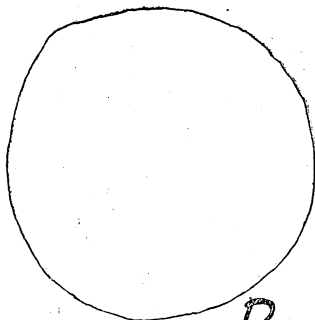
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Herlong



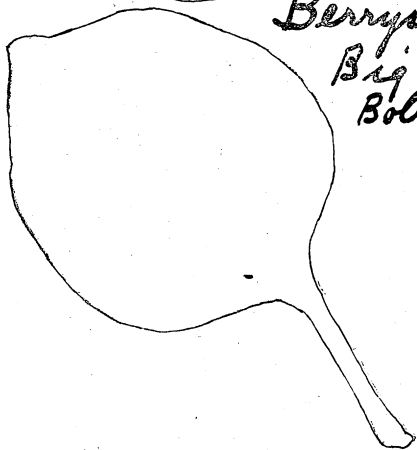
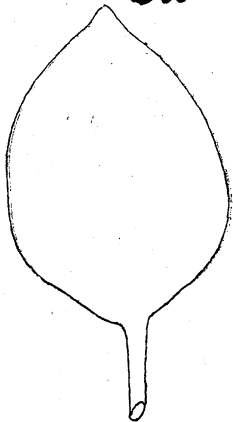
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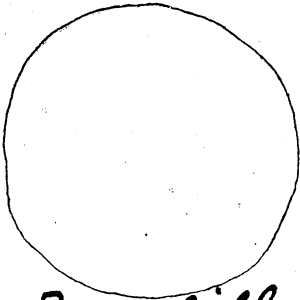


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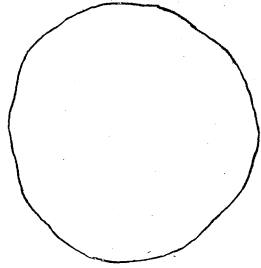


Berry's
Big
Boll

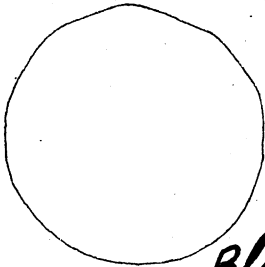
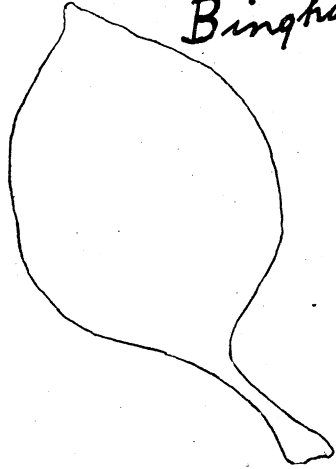
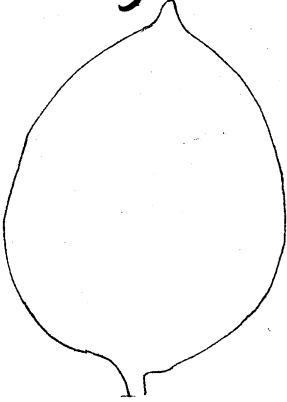




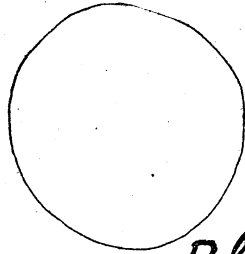
Berryhill



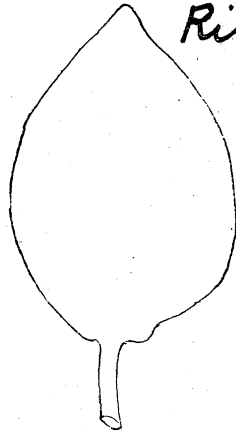
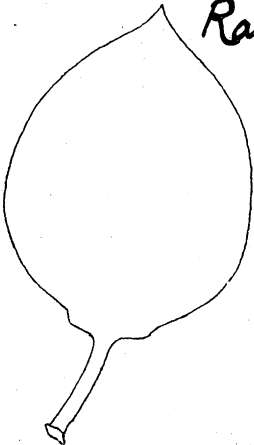
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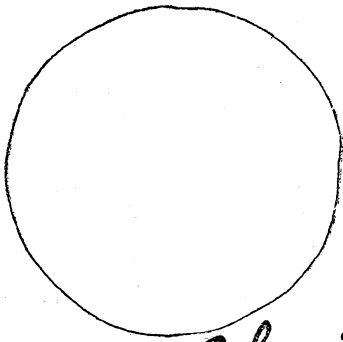


*Black
Rattler*

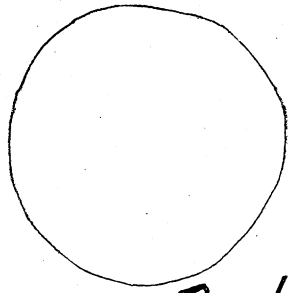


*Blue
Ribbon*

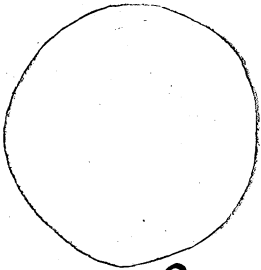
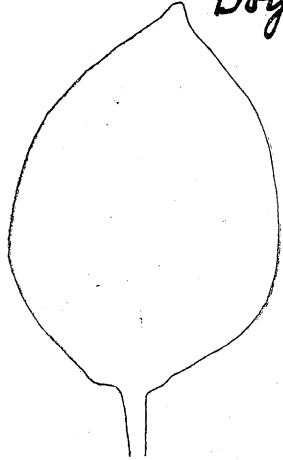
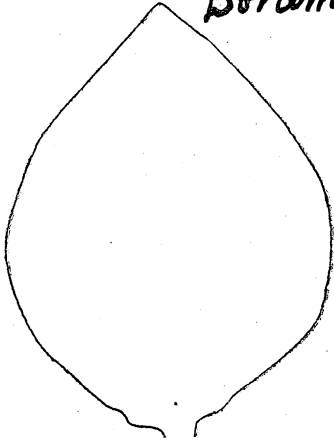




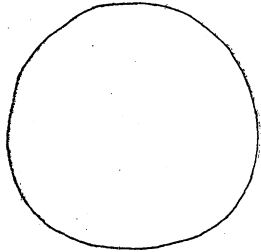
Bohemian



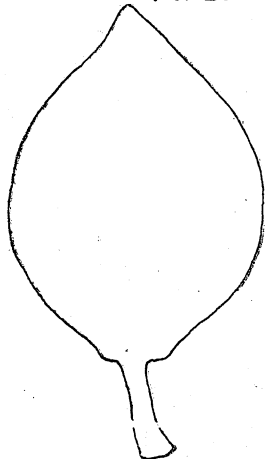
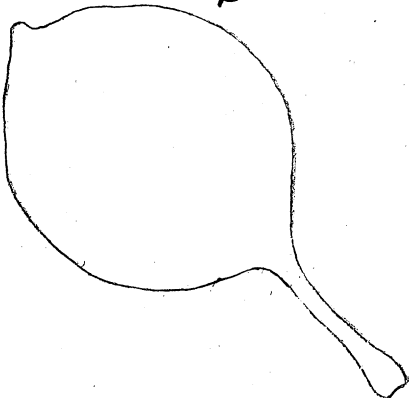
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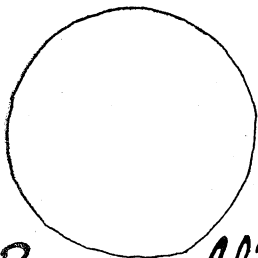


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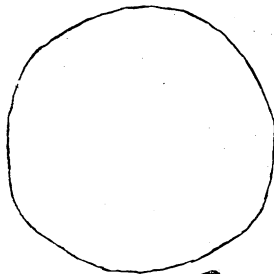


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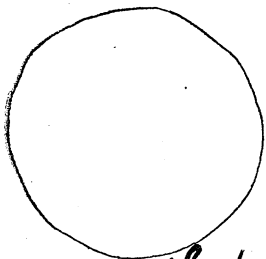
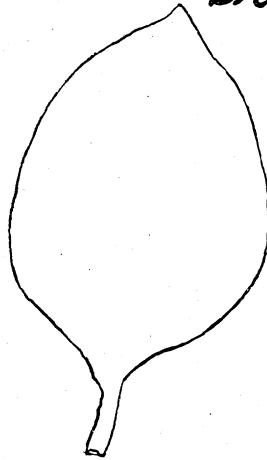
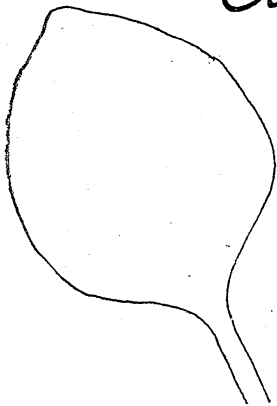




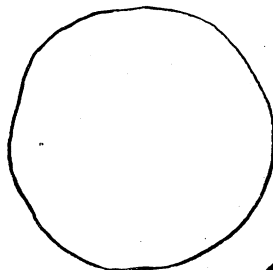
*Braswell's
Cluster*



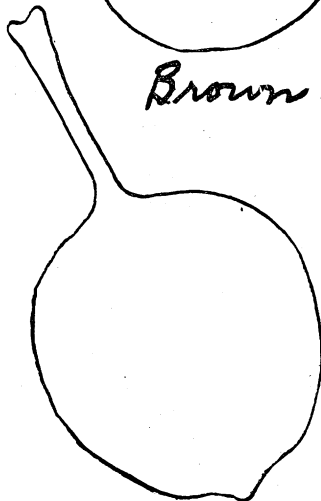
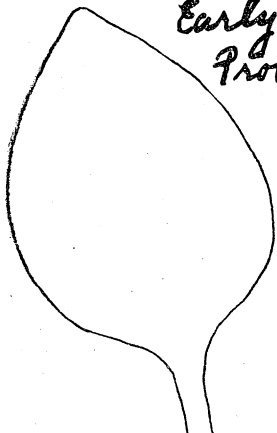
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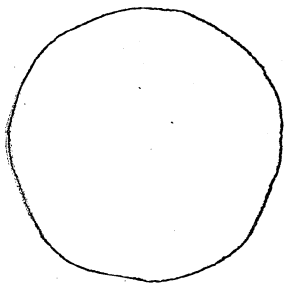


*Butler's
Early
Prolific*

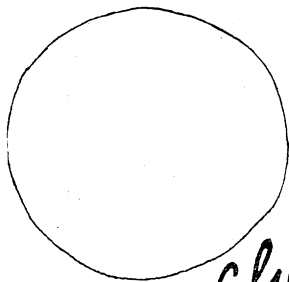


Brown No. 1.

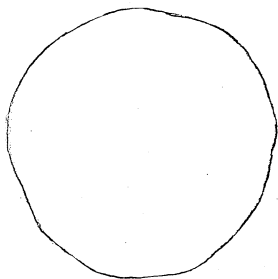
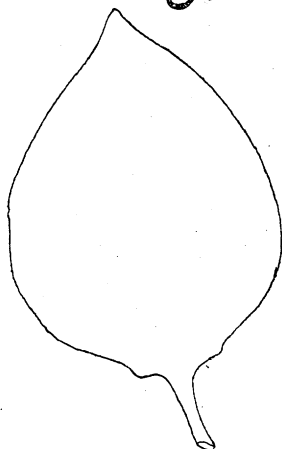
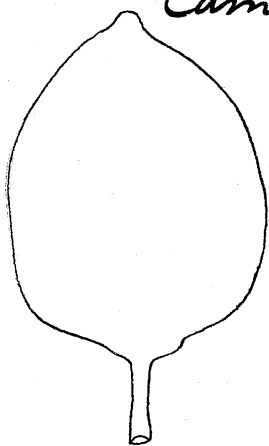




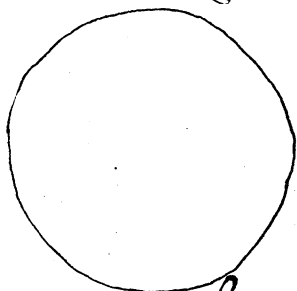
Cameron



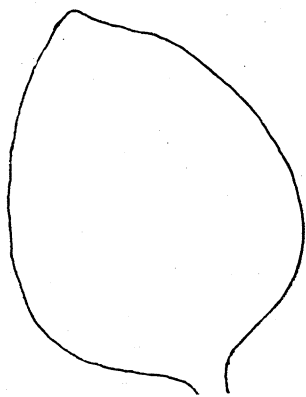
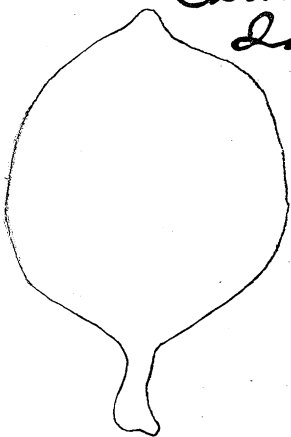
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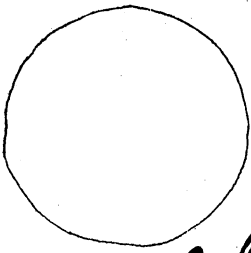


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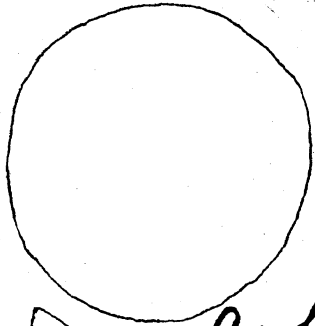


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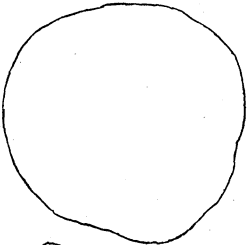
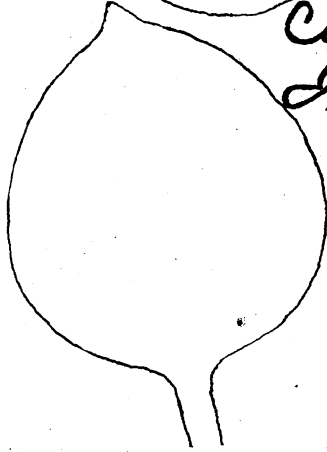
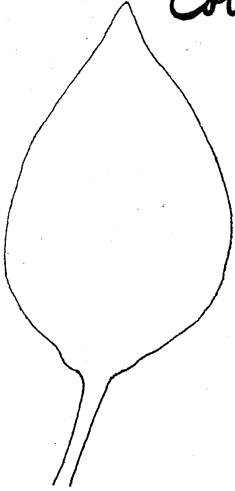




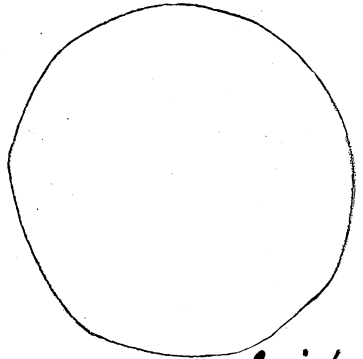
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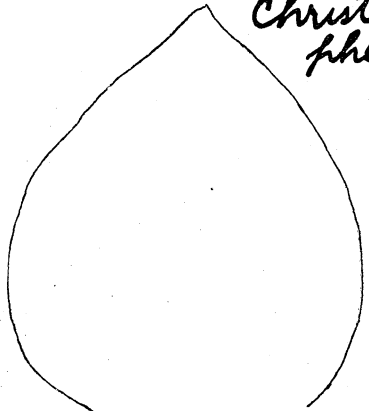
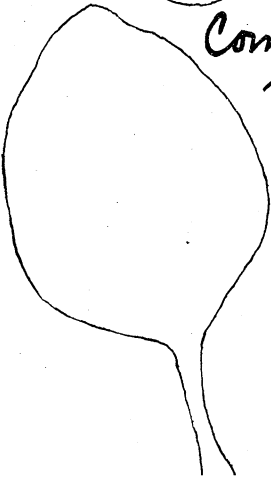
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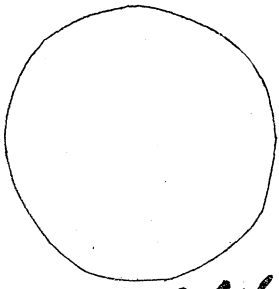


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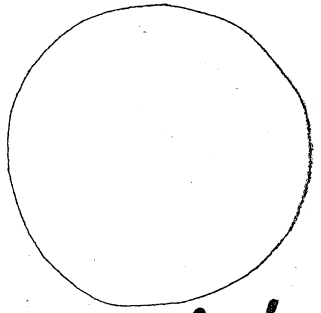
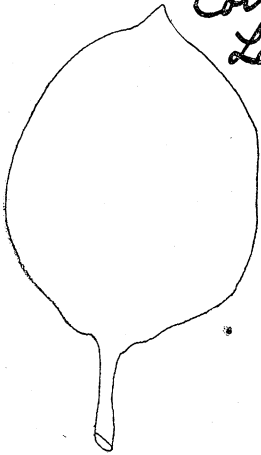


*Christo-
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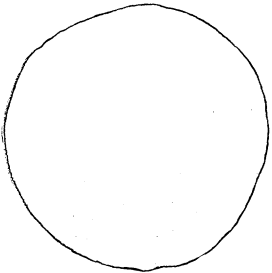
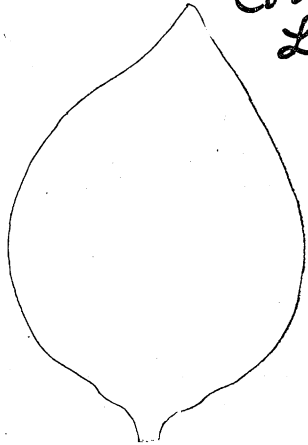




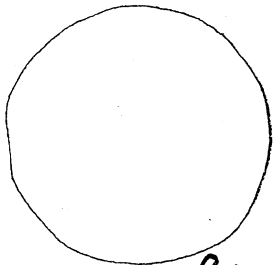
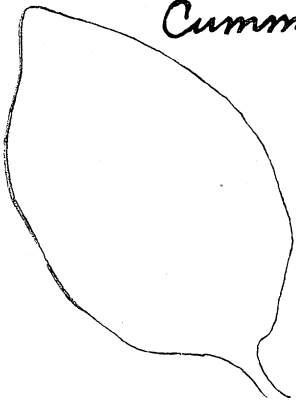
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Laclede



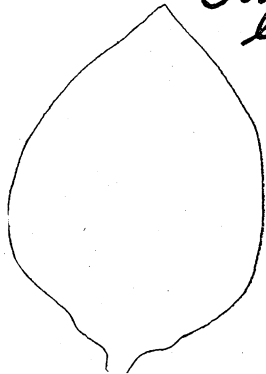
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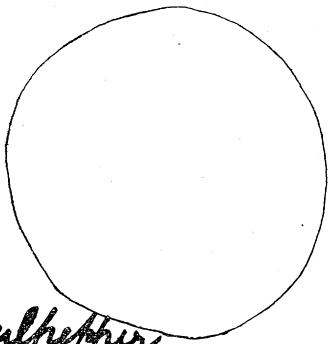


Cummings

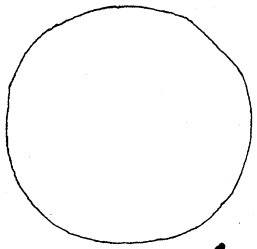


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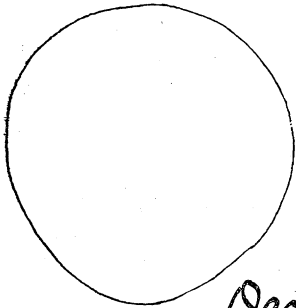
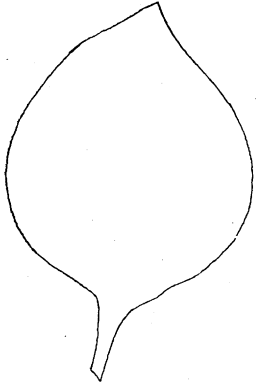
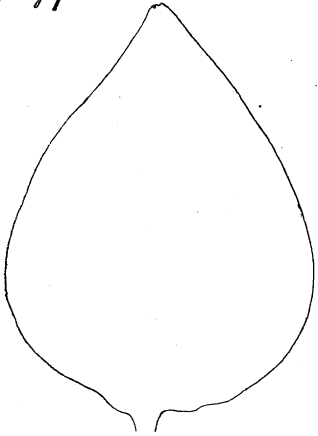




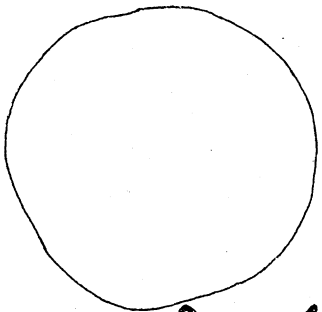
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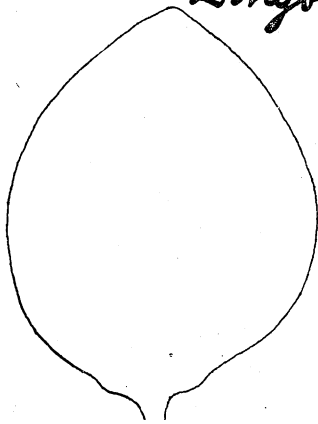
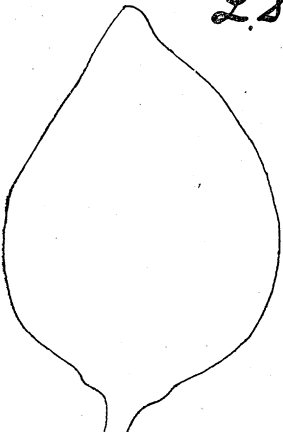
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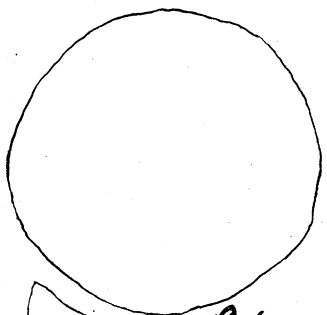


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L.S.*

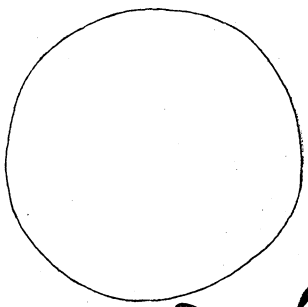
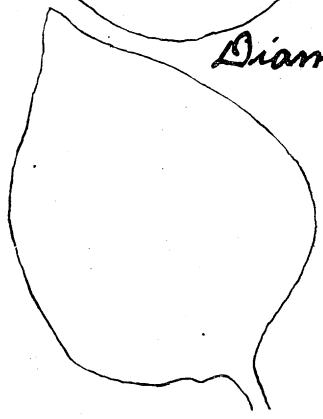


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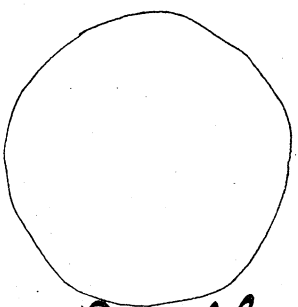
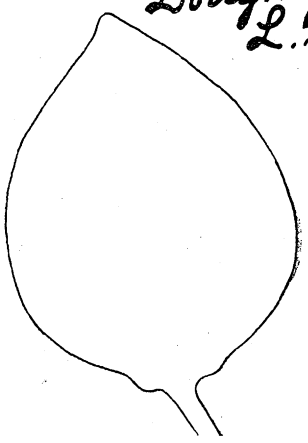




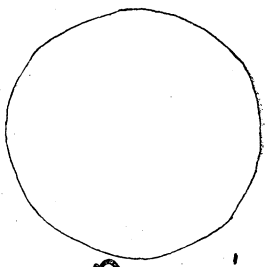
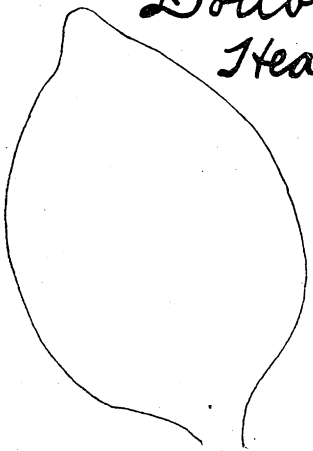
Diamond



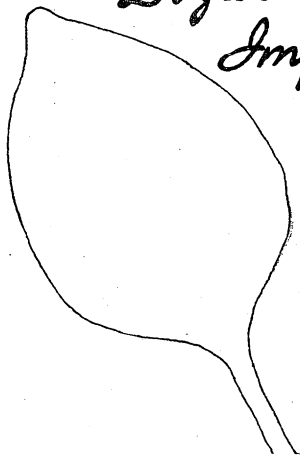
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L.S.*

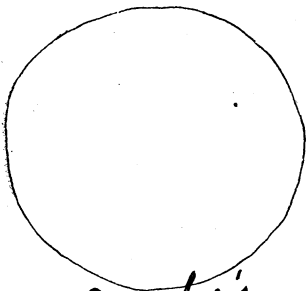


*Double
Header*

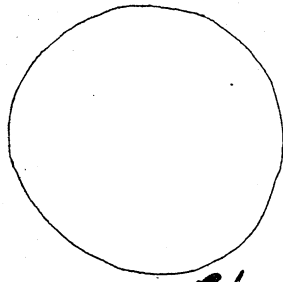
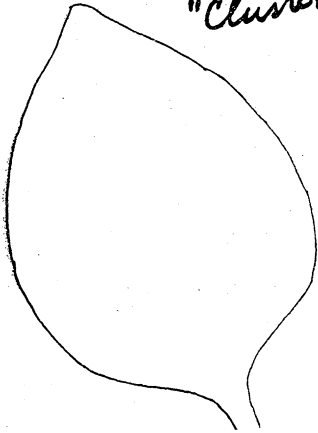


*Dozier's
Impd.*

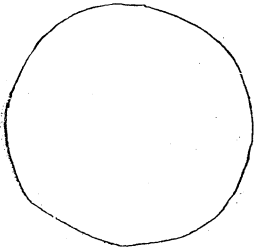
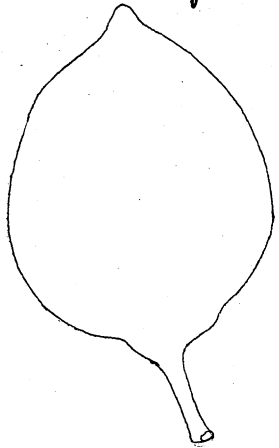




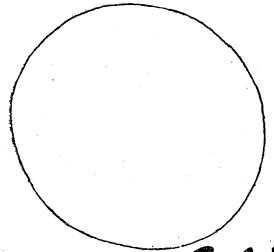
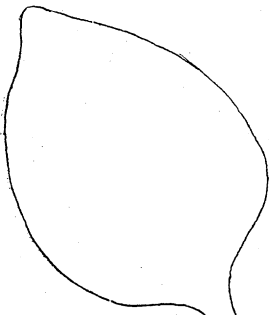
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"Cluster."*



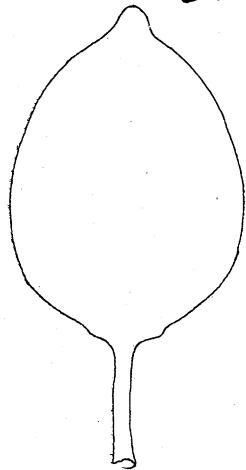
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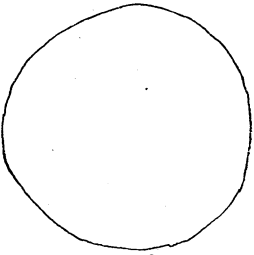


*Drake's
Defiance*

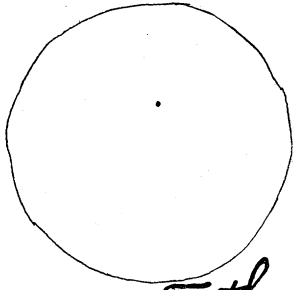


Ellis

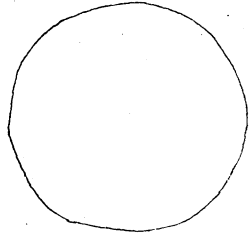
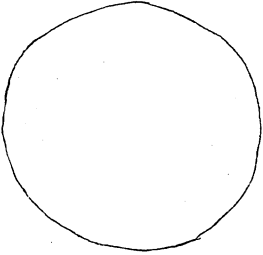
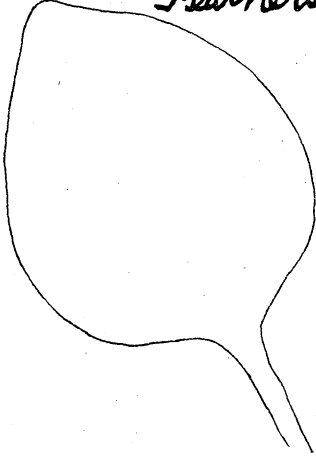
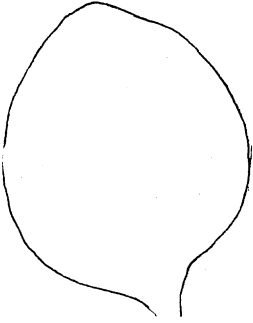




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Early*

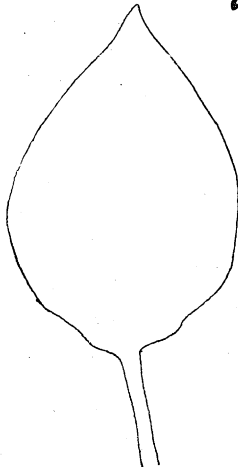
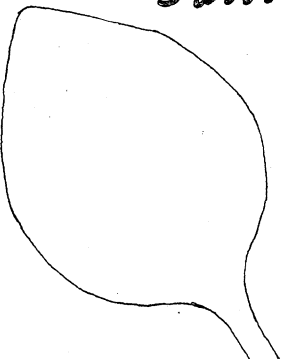


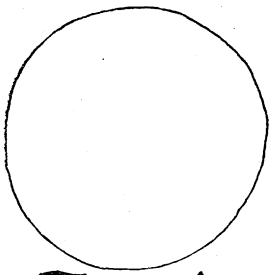
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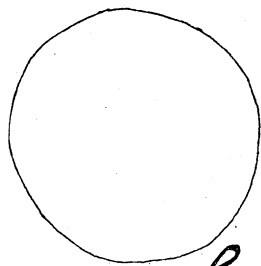
Ferguson

Favorite

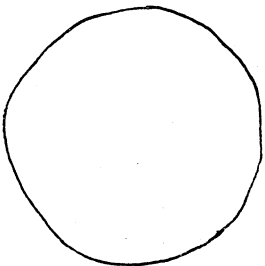
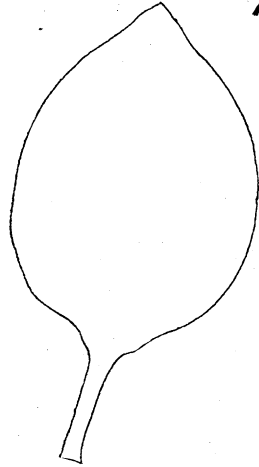
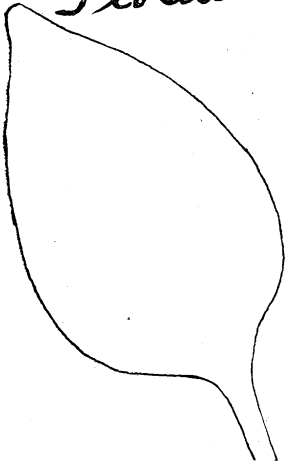




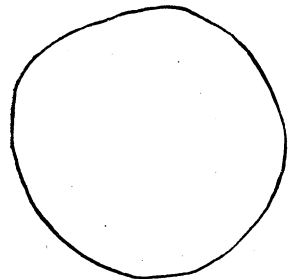
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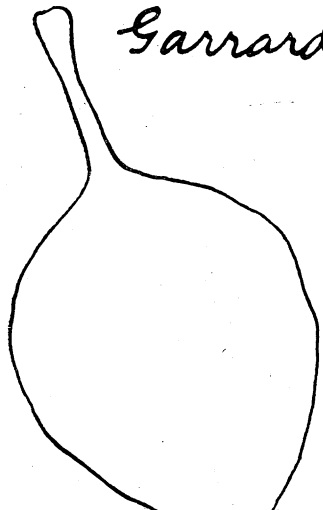
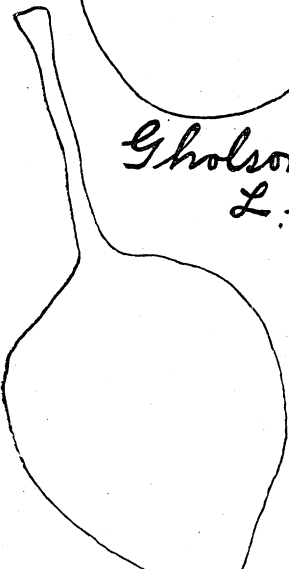
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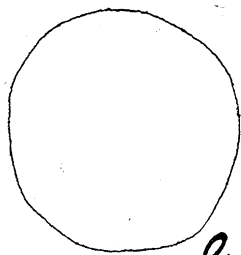


Gholson
L.S.

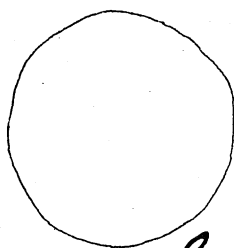
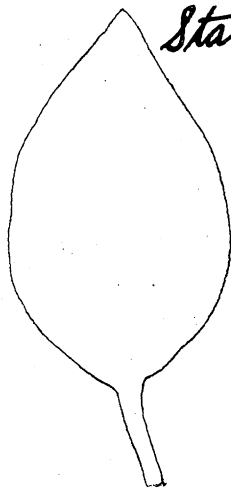


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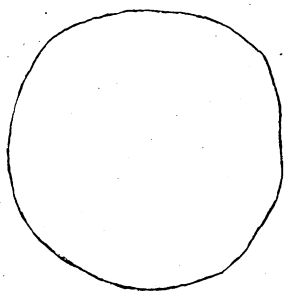
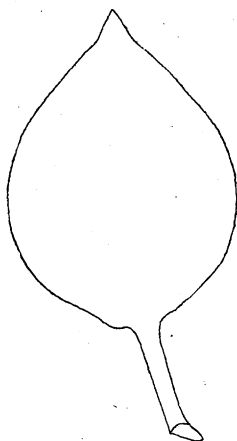




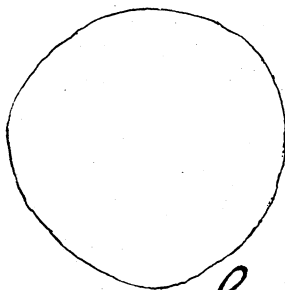
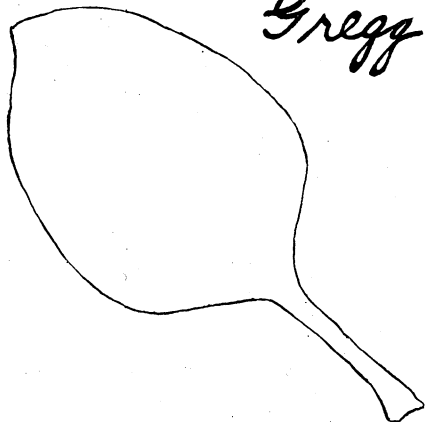
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Standard*



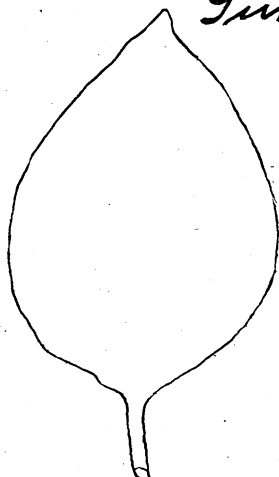
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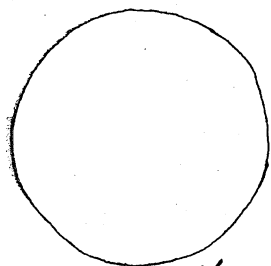


Gregg

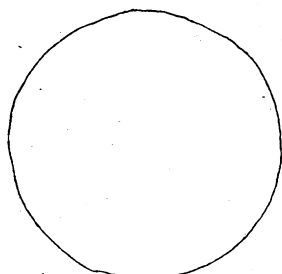


Gunn

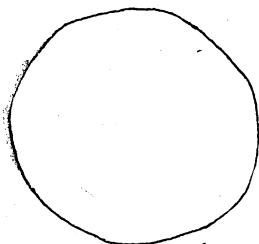
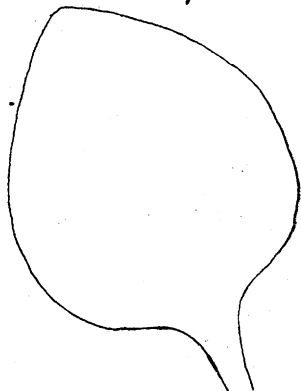
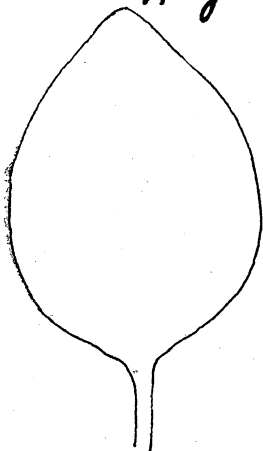




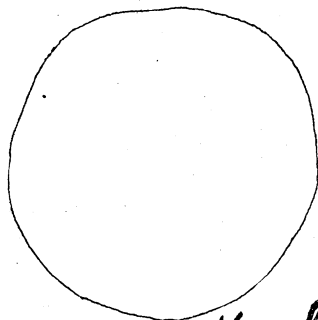
Hagaman



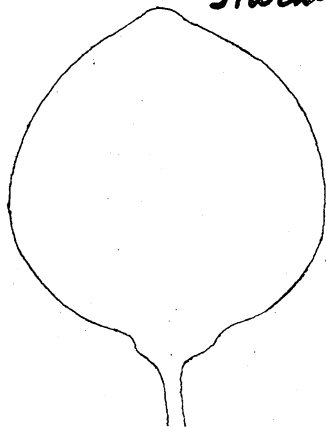
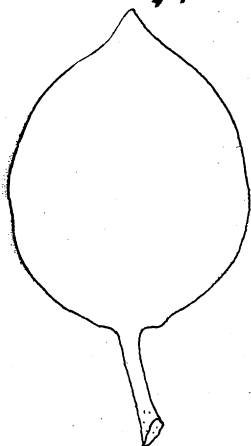
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Impid*

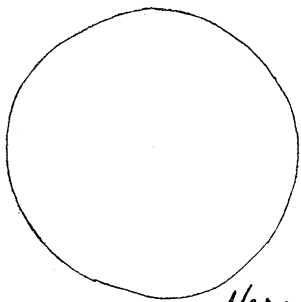


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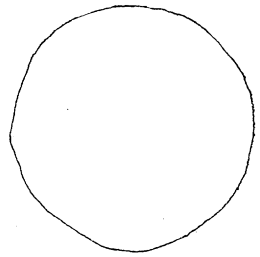


Haralson

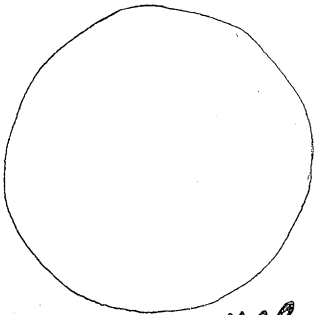
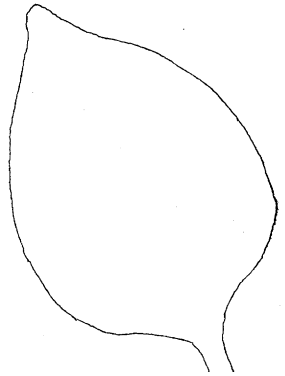
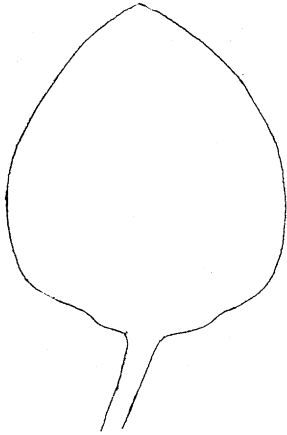




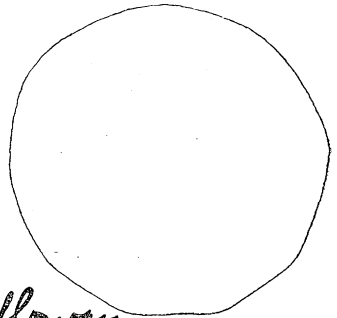
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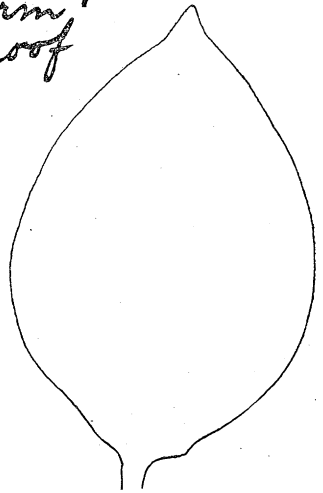
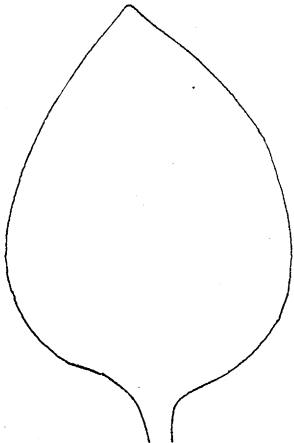
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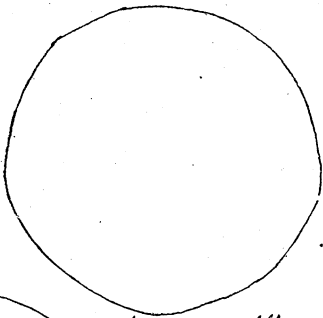


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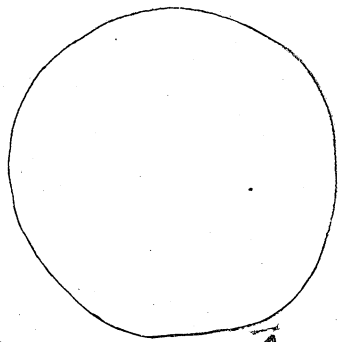


*Holloway
Storm
Proof*

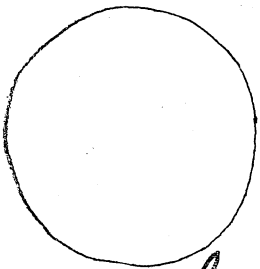
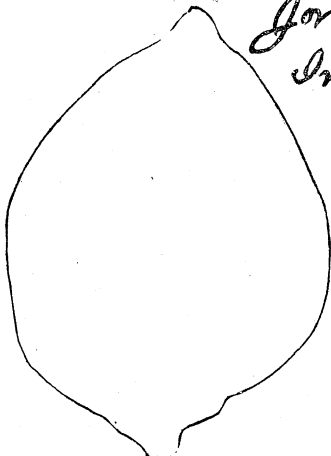
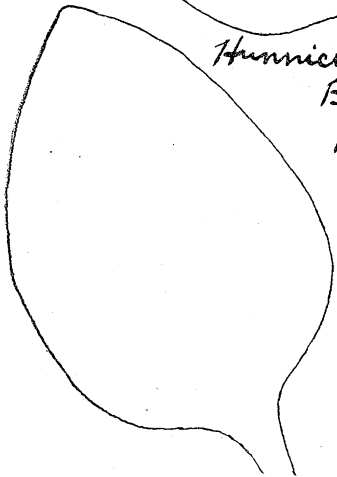




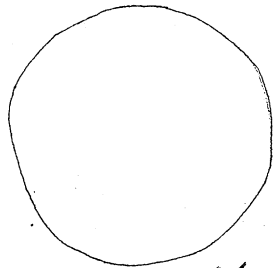
Hunnicutt's
Big
Boll



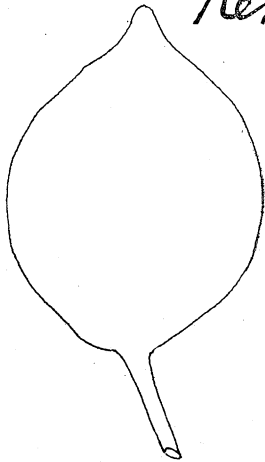
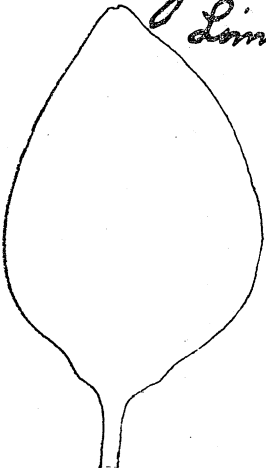
Jones
Impr'd

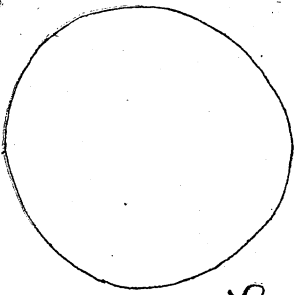


Jackson
Limbless

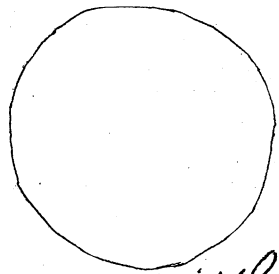
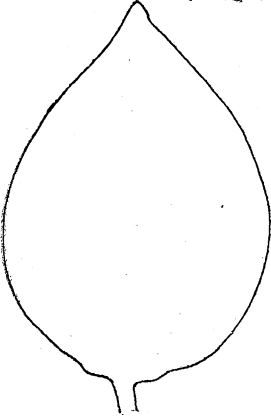


Keno

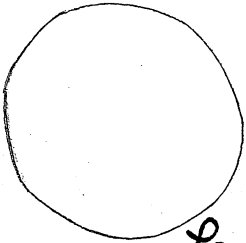
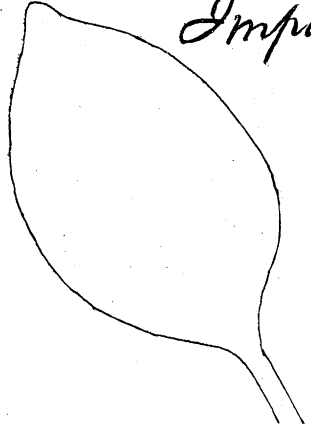




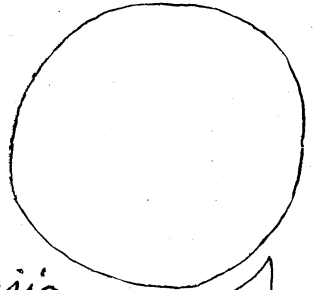
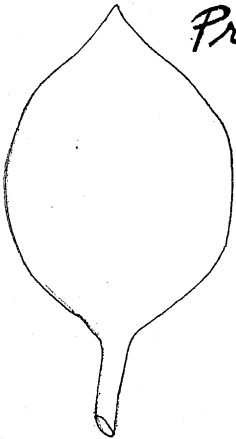
Lee



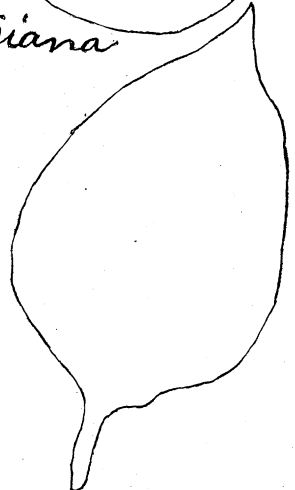
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Imp'd*

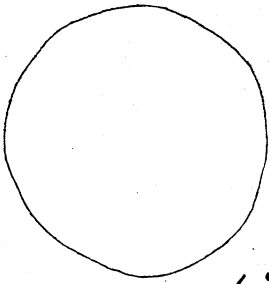


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Prize*

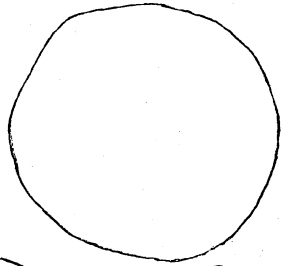
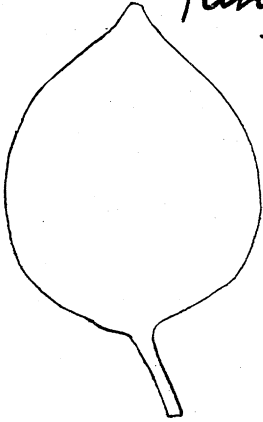


Louisiana

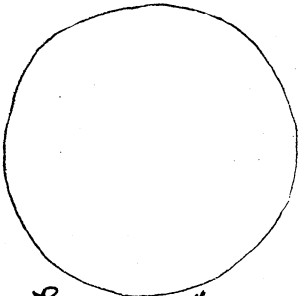
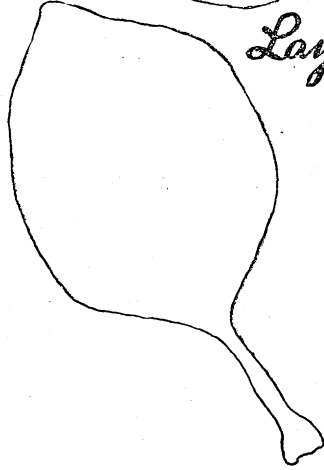




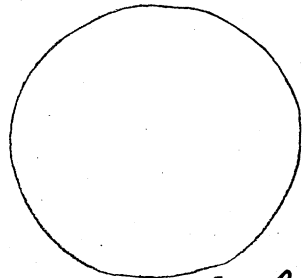
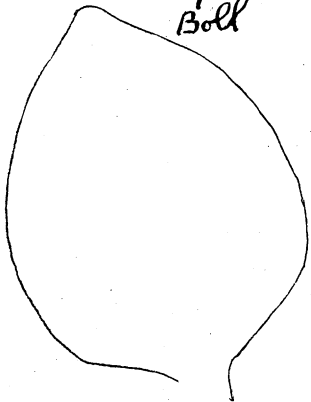
King



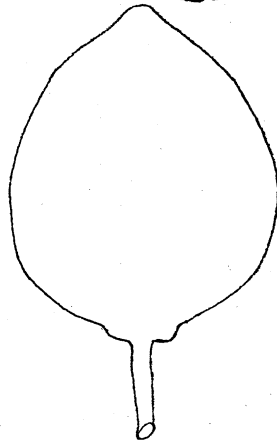
Layton

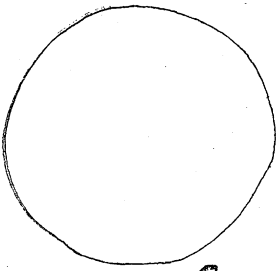


*Langford's
Big
Ball*

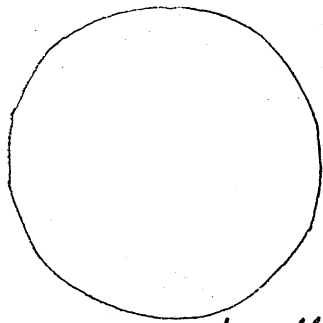


Sealand

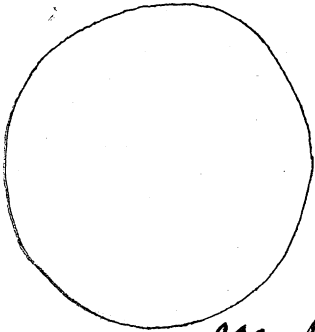
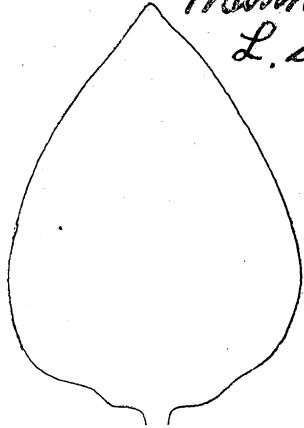
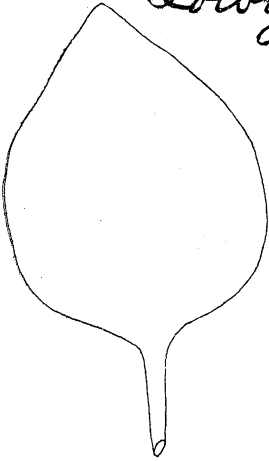




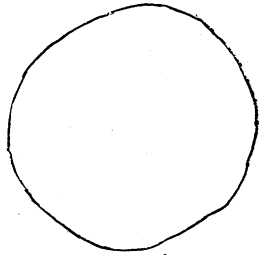
Lowry



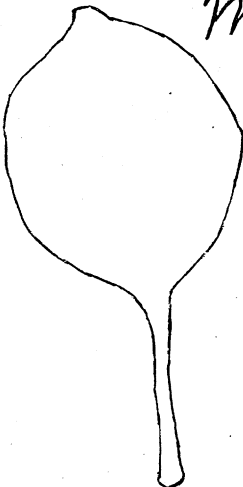
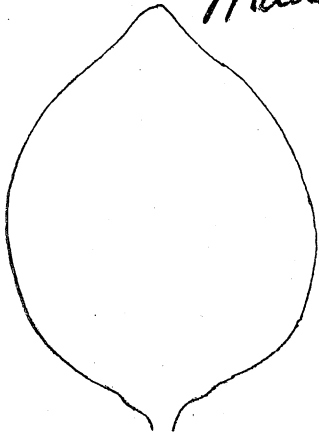
*Matthew's
L.S.*

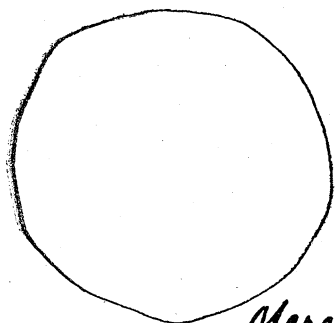


Maddox

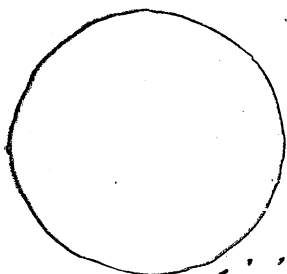
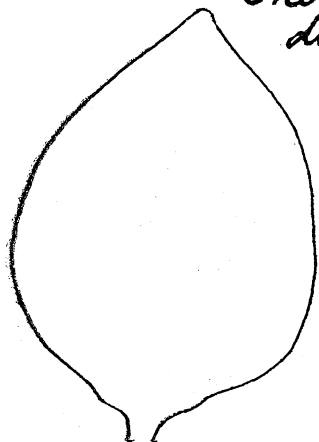


McCall

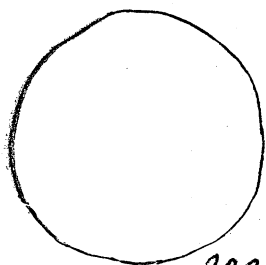
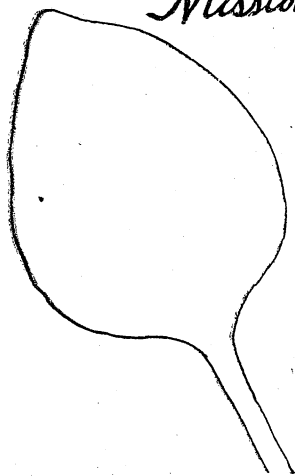




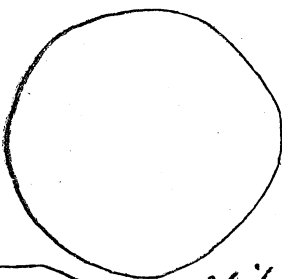
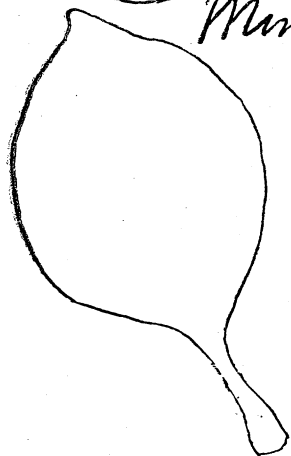
*Mere-
dith*



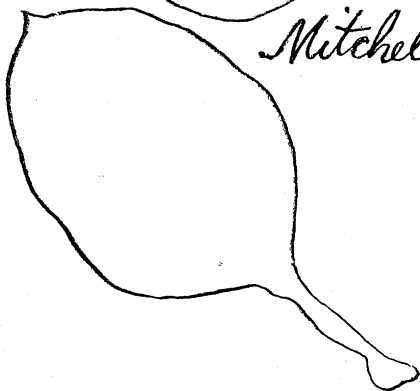
Missionary

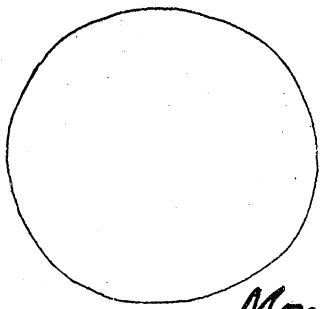


Minor

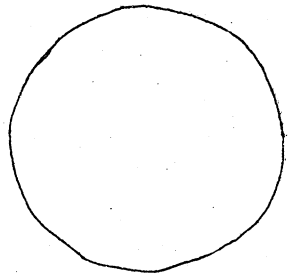


Mitchell

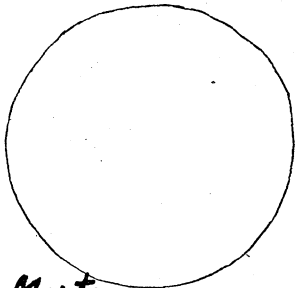
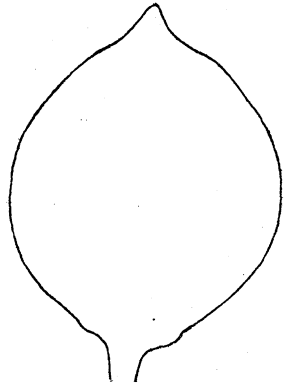
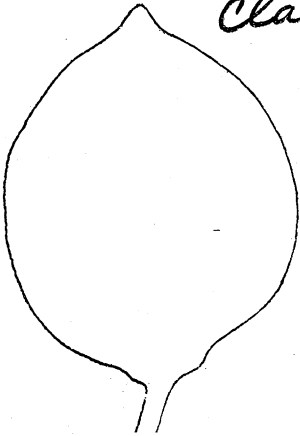




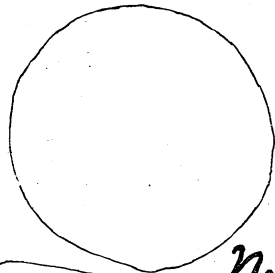
*Mont
Clare*



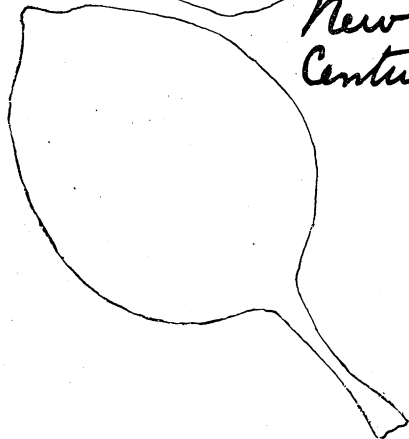
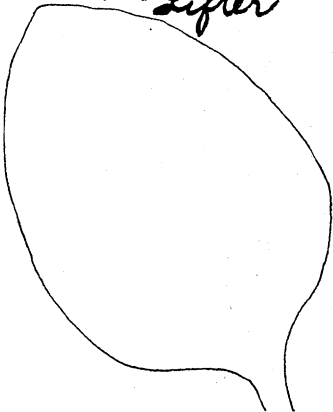
Moss

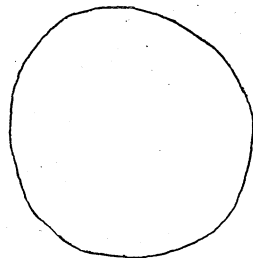
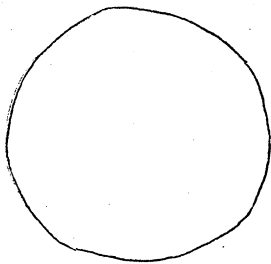


*Mortgage
Lifter*

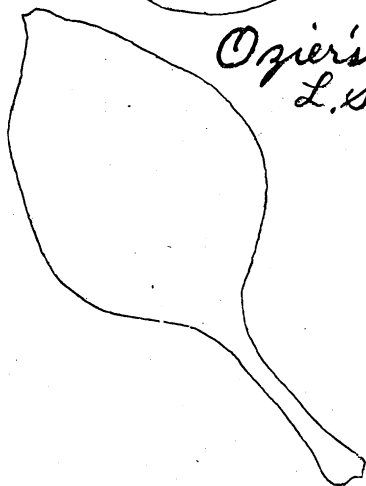


*New
Century*



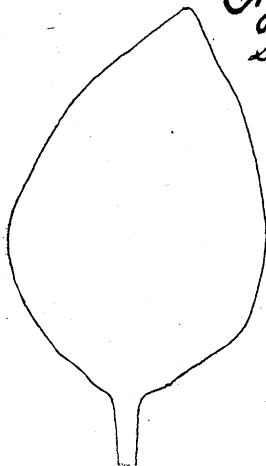
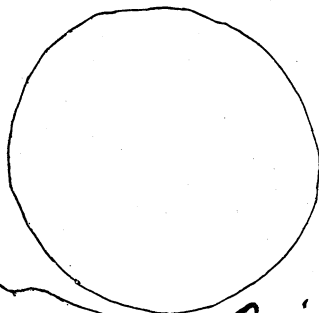
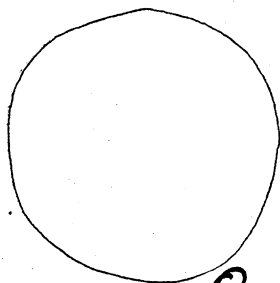


No. 148

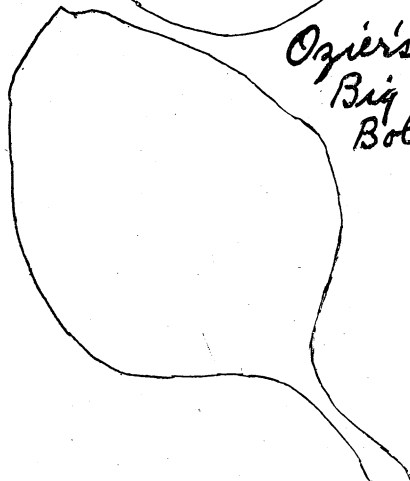


Ozier's
L.S.

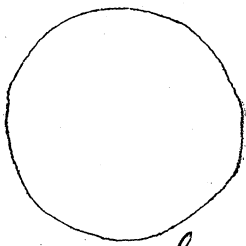
Dixie Wilt-Resistant.



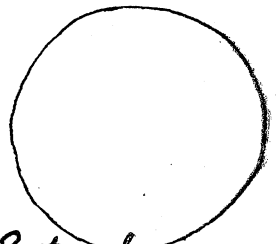
Ozier-
Starnes



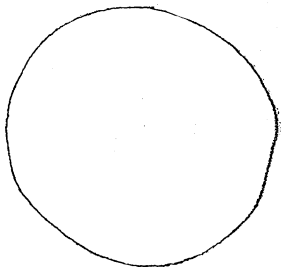
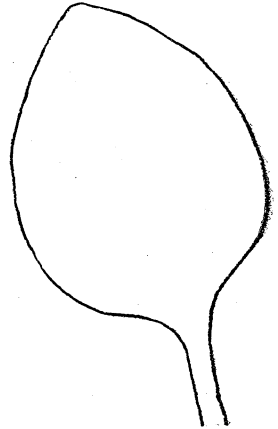
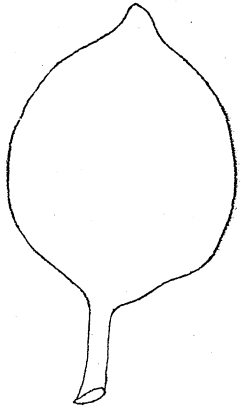
Ozier's
Big
Boll



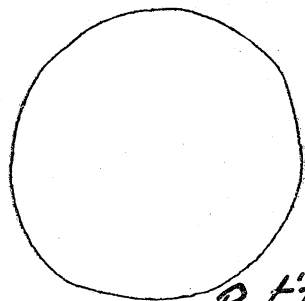
Parker



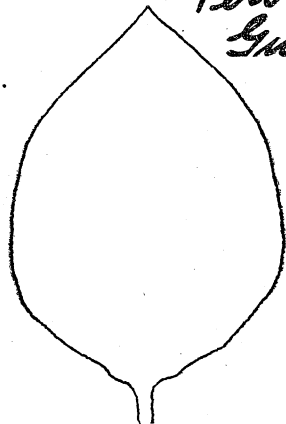
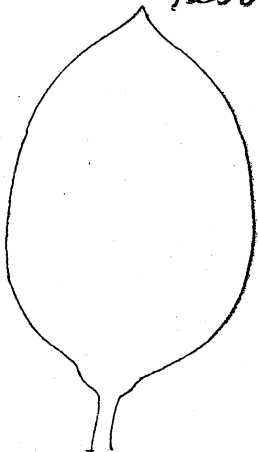
Peterkin

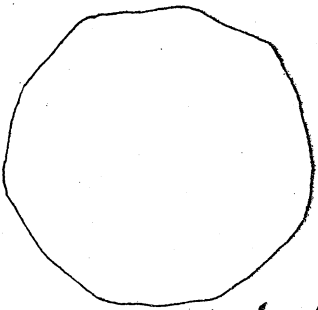


Peerless

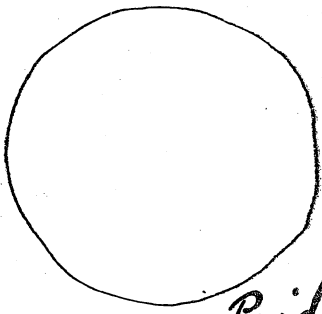


*Petit
Gulf*

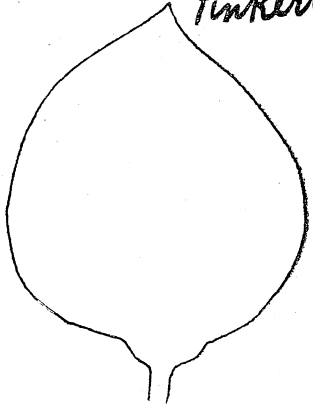




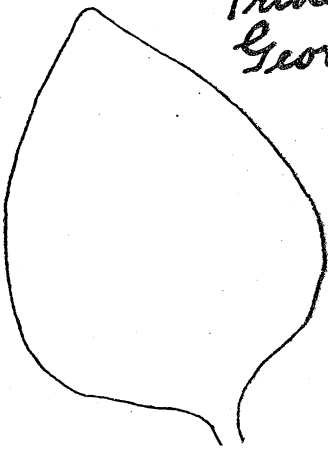
Pinkerton



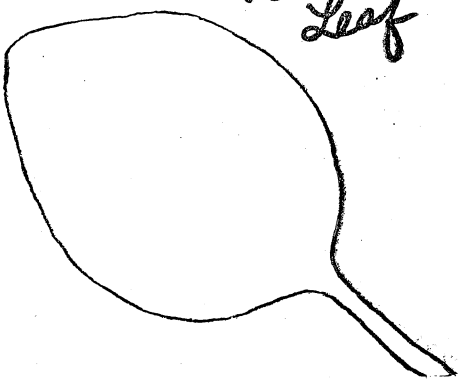
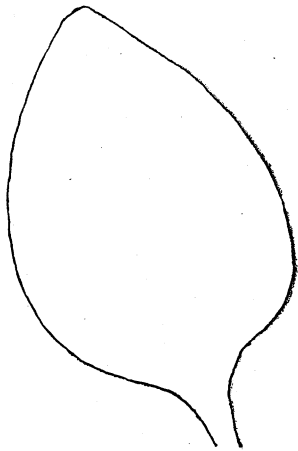
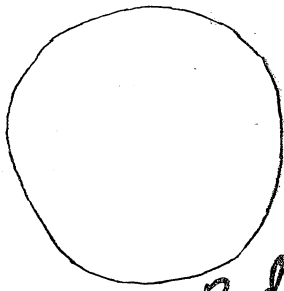
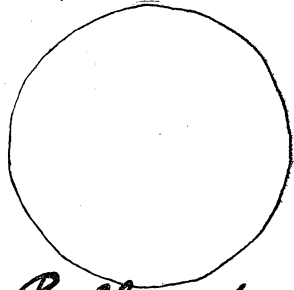
Pride of Georgia

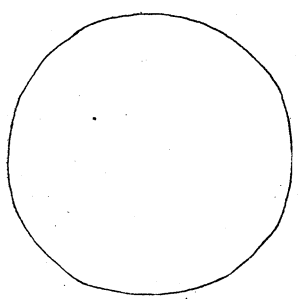


Bullnot

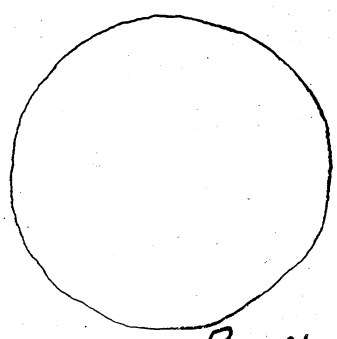


Red Leaf

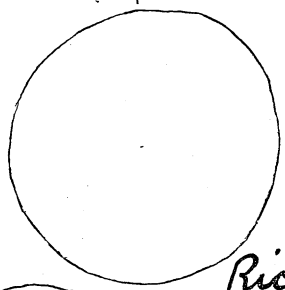
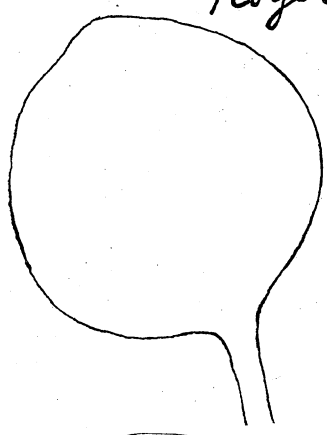
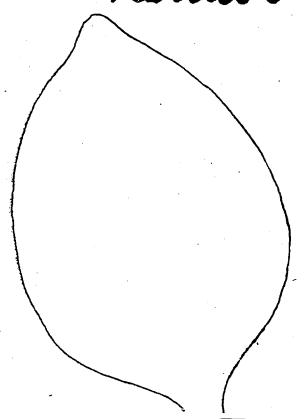




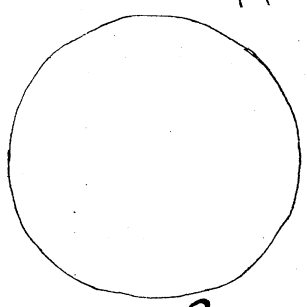
Reliable



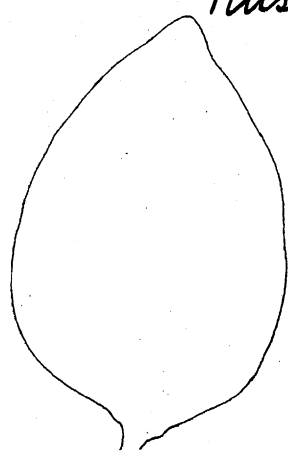
Rogers

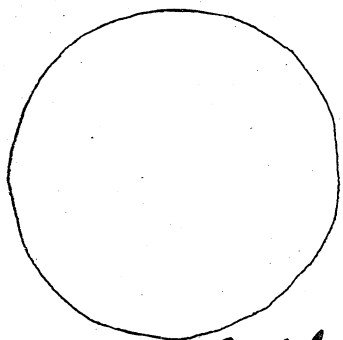


*Rich
Man's
Pride*

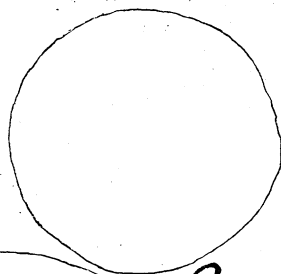


Russell

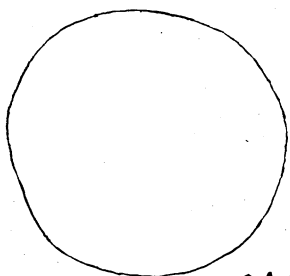
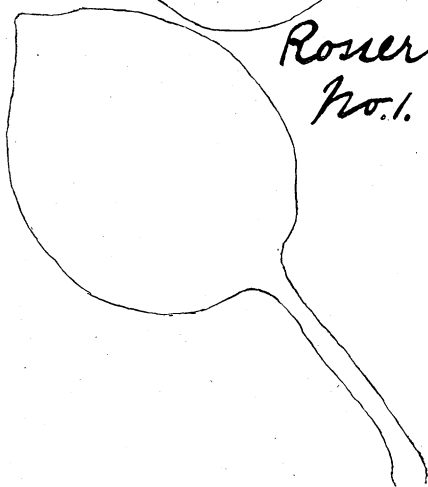
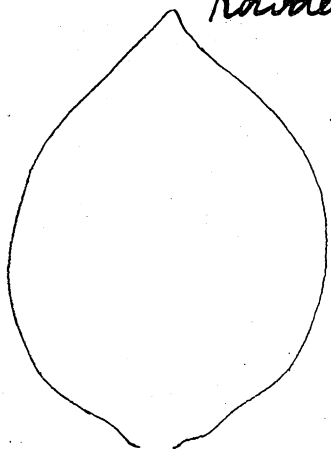




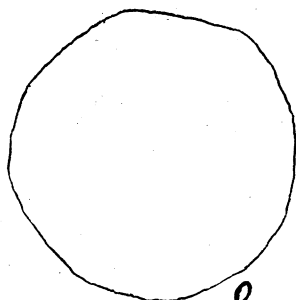
Rovden



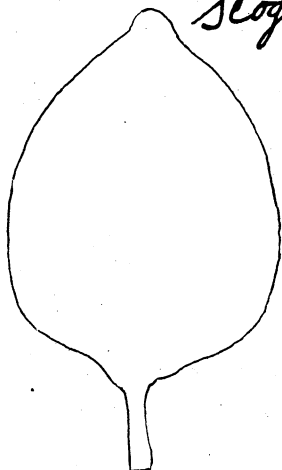
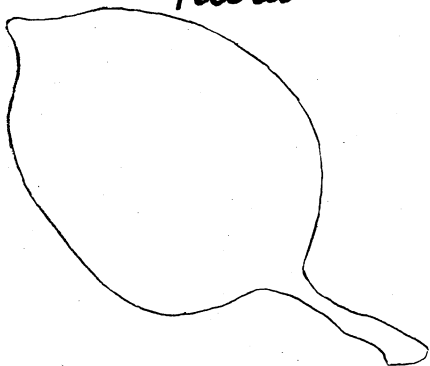
*Roser
No. 1.*

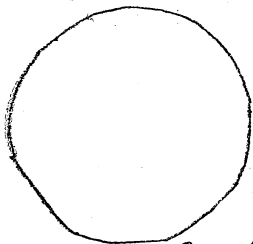


Ruralist

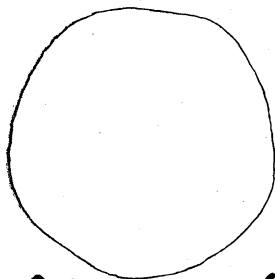
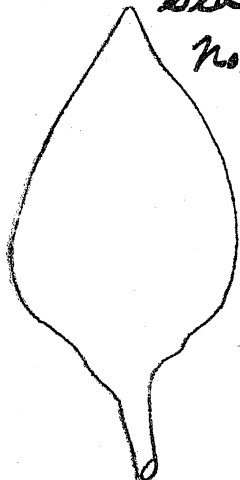


Sequin

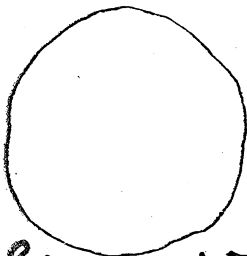
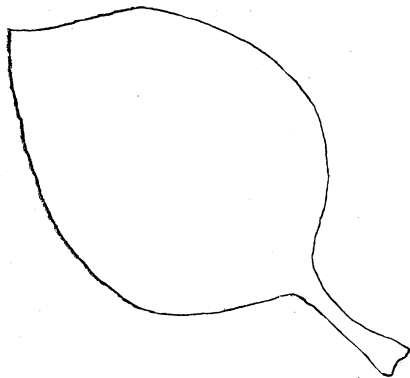




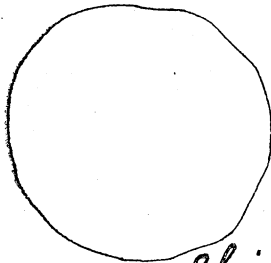
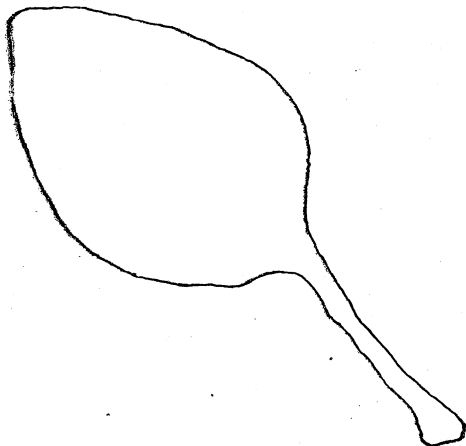
Sea Island
No. 7036



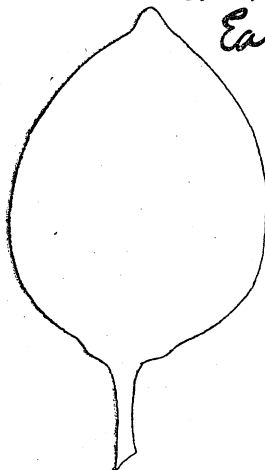
Sistrunk

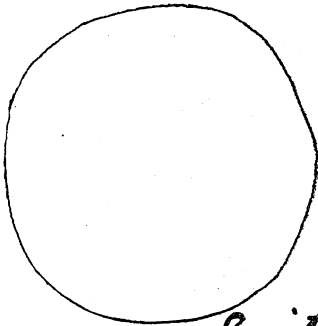


Simmi' L. S.

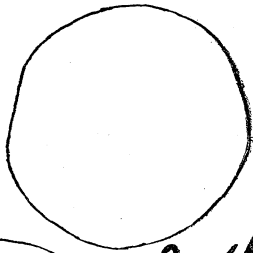


Shiner's
Early

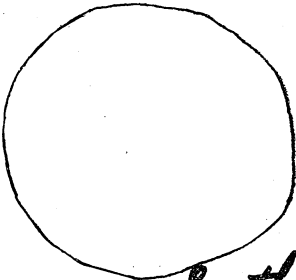
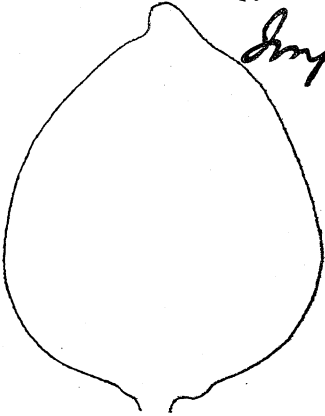




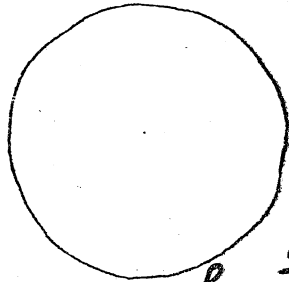
*Smith's
Imp'd.*



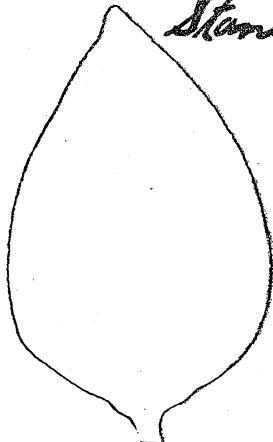
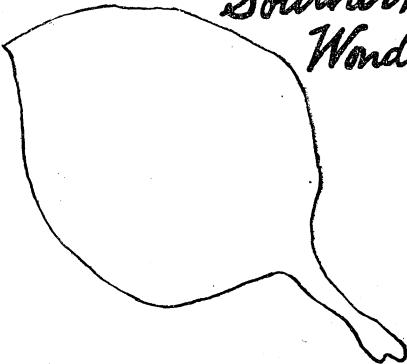
*Southern
Hope*



*Southern
Wonder*

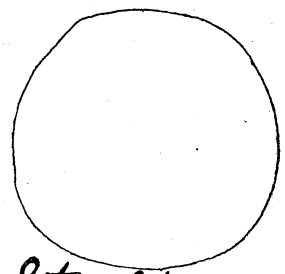


*Smith's
Standard*

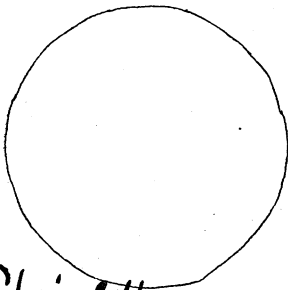
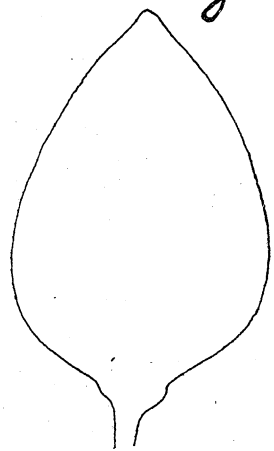
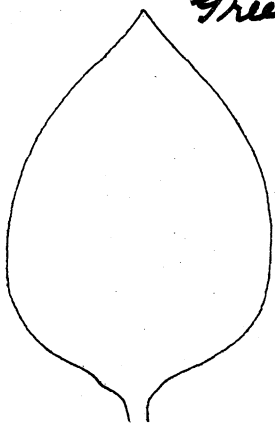




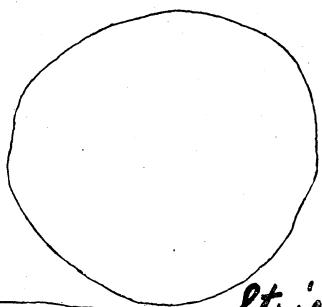
Spruiell's Early Green Seed



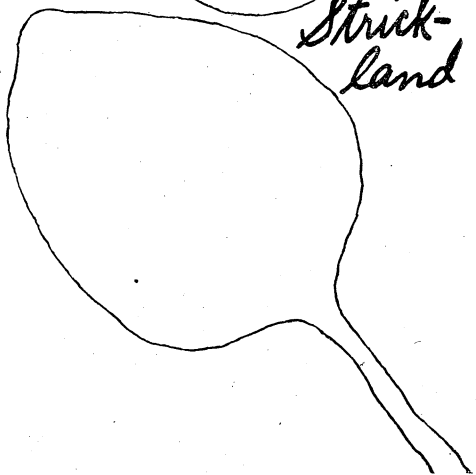
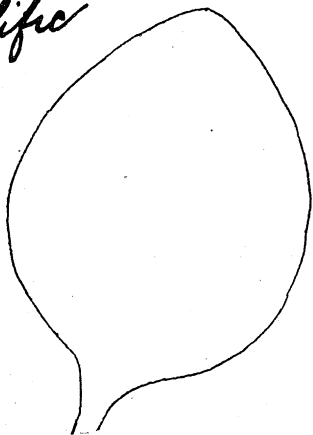
Sterling

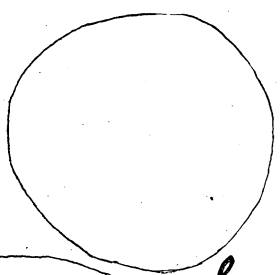


Speight's Prolific

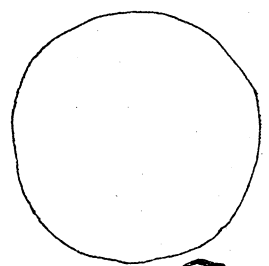
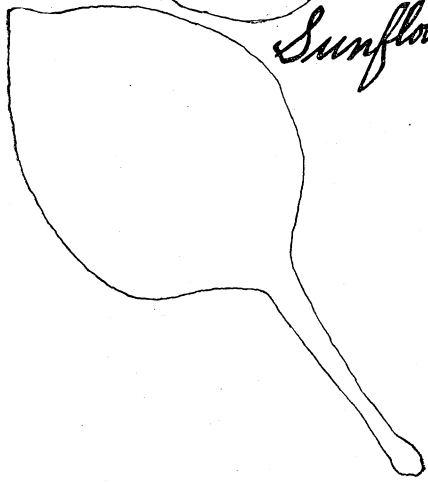


Strickland

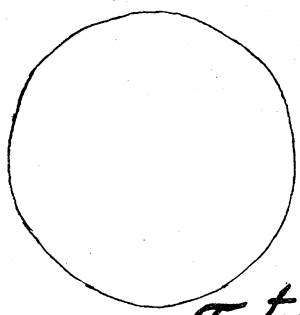
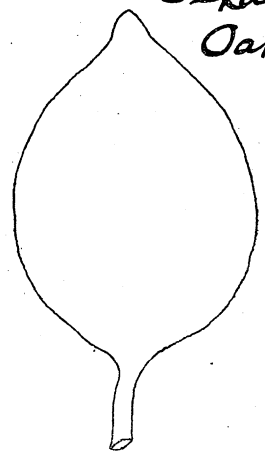




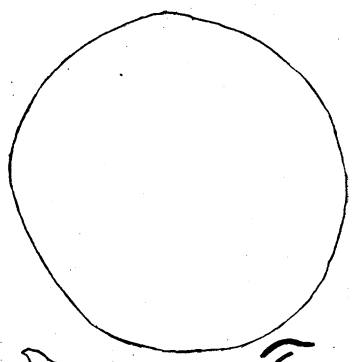
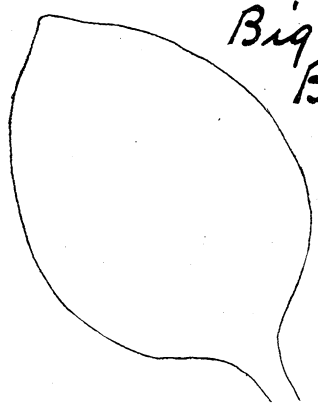
Sunflower



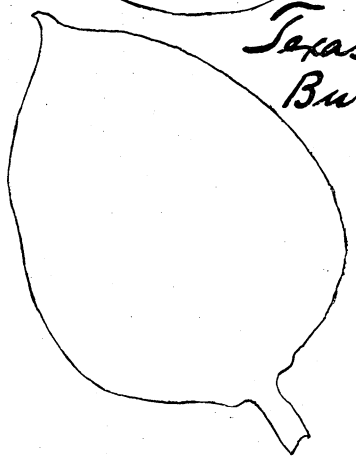
*Texas
Oak*

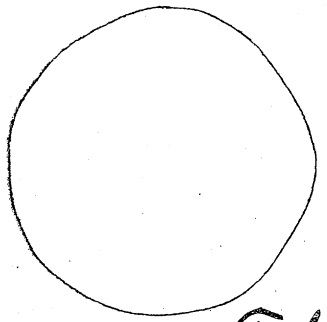
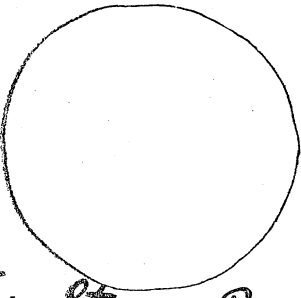


*Tatum's
Big
Boll*



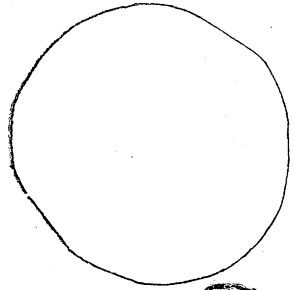
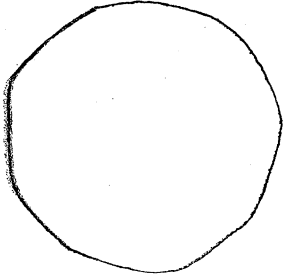
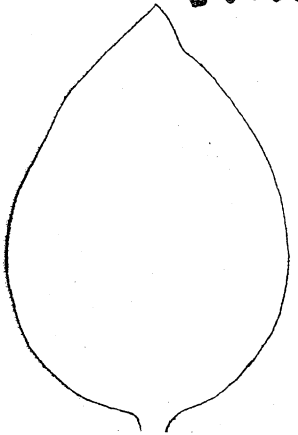
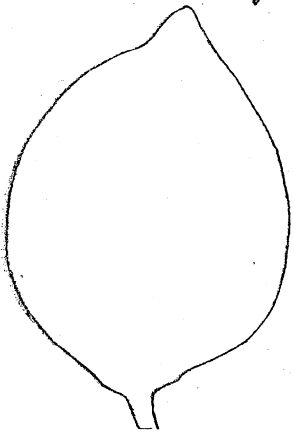
*Texas
Bur*





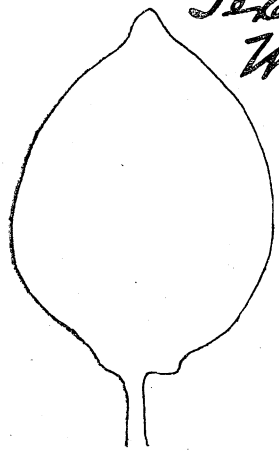
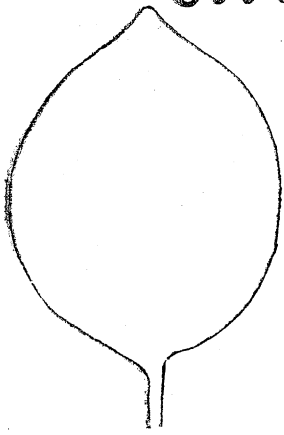
Tex. Storm Proof

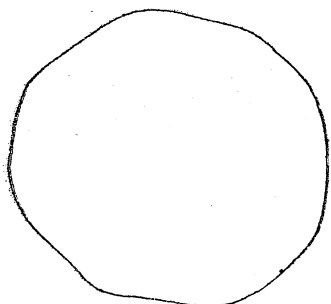
Todd



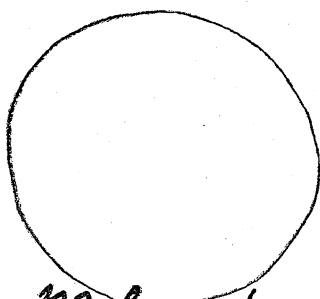
Toole

*Texas
Wood*

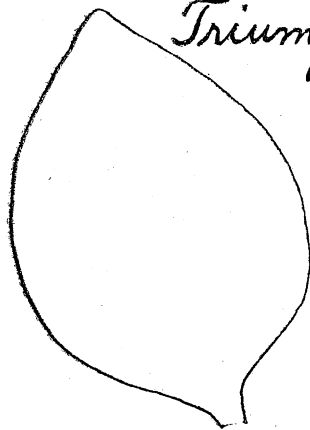
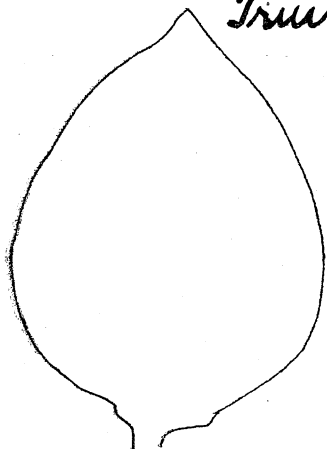




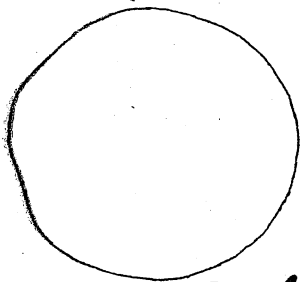
Truitt



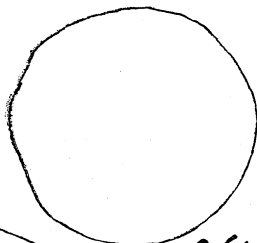
*Mebane's
Triumph*



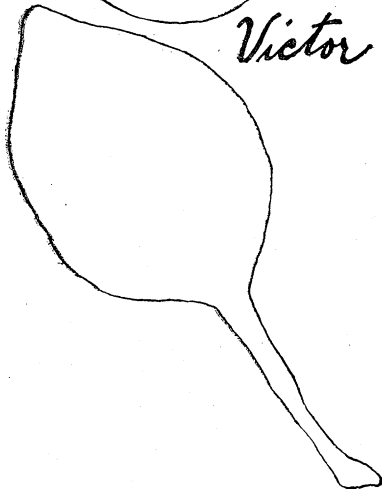
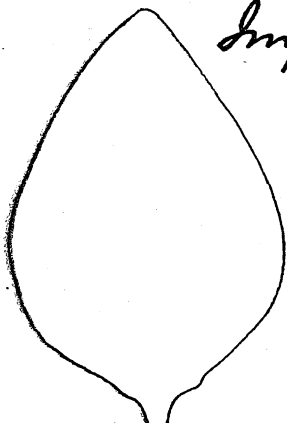
Triumph.

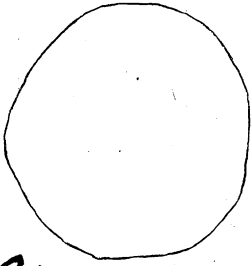


*Tucker's
Imp'd.*

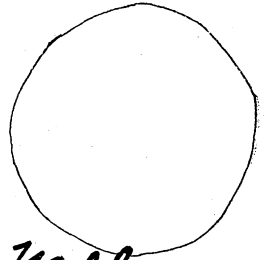


Victor

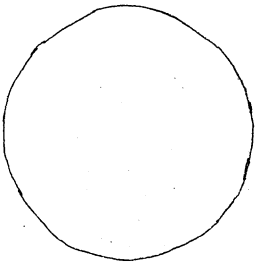
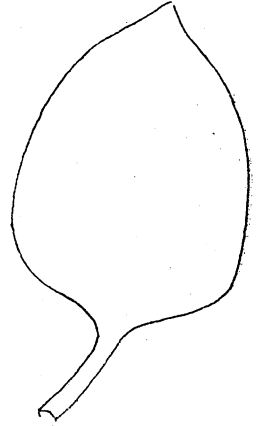
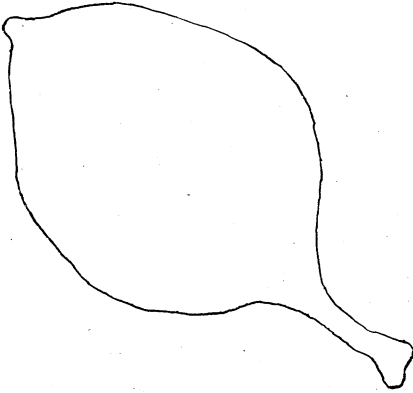




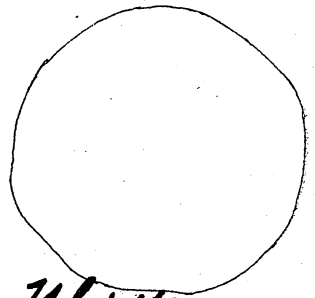
Warren



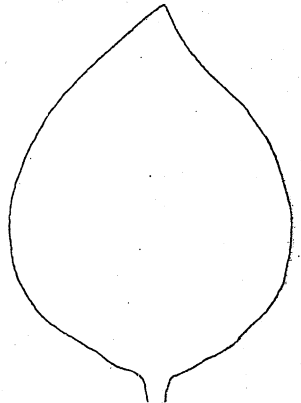
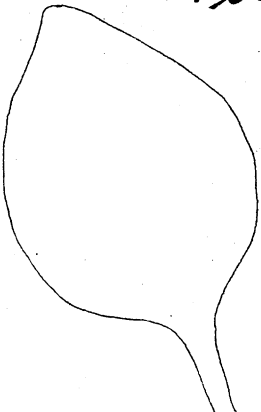
Welborn

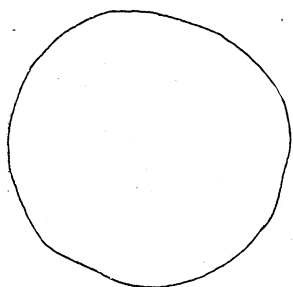


Webb

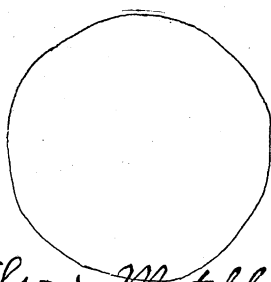


Whitten

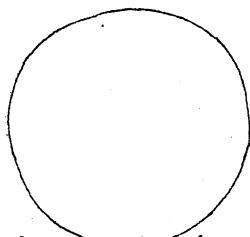
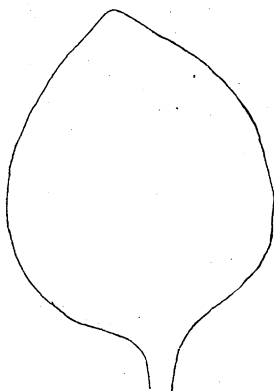
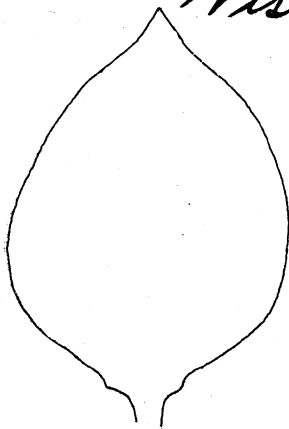




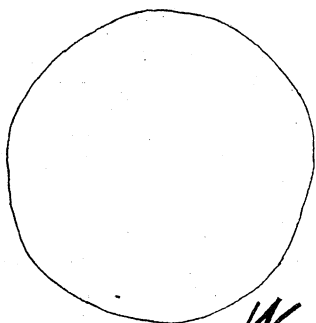
Wise



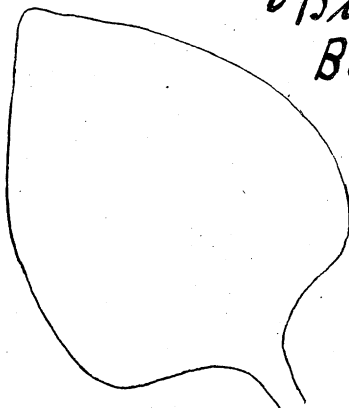
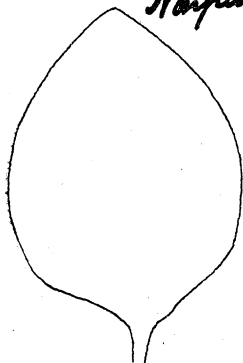
Wilson's Matchless

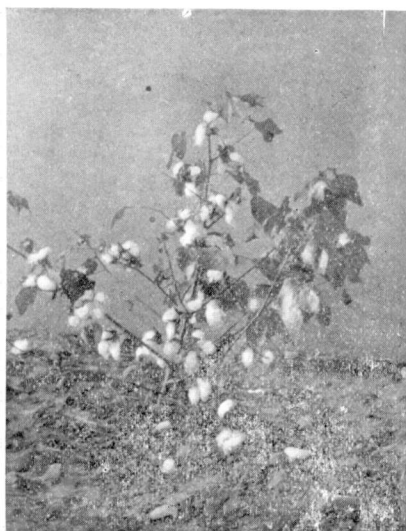


*Woodfin's
Karpacil*

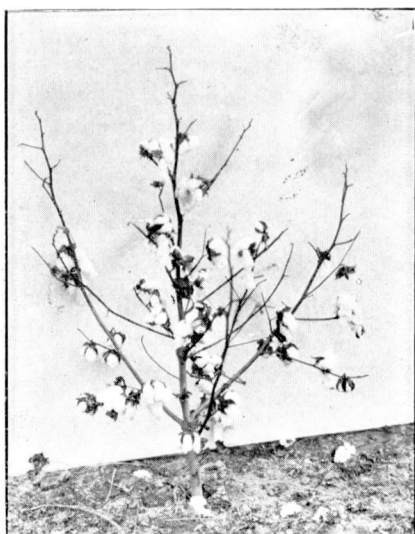


*Wyche's
Big
Ball*

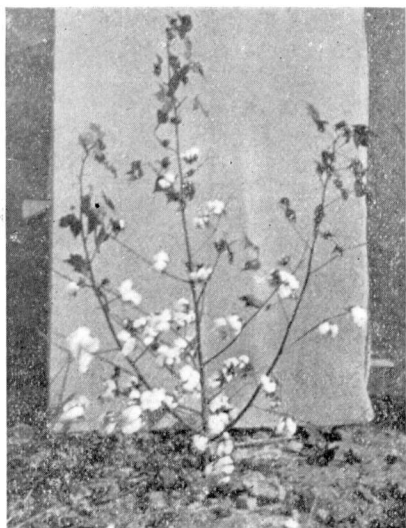




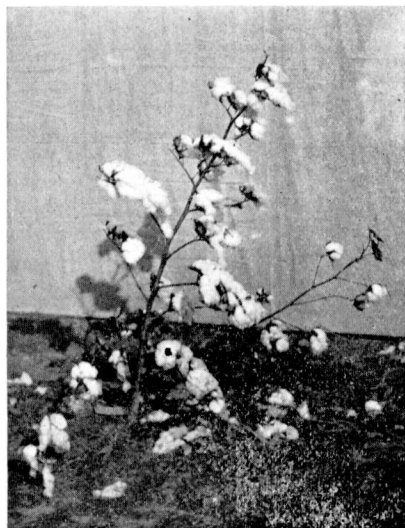
Alex. Allen.



Anderson.

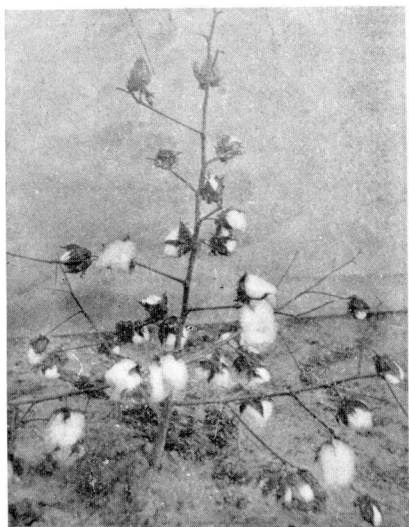


Allen Long Staple.

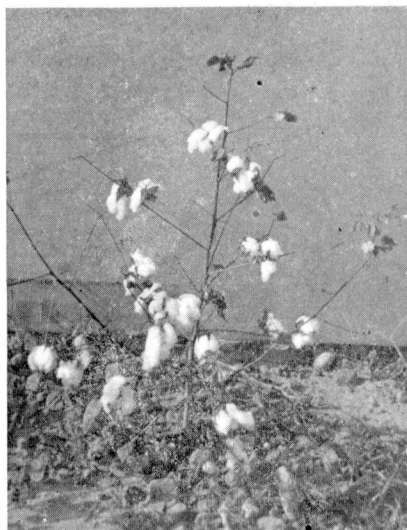


Anson Cream.

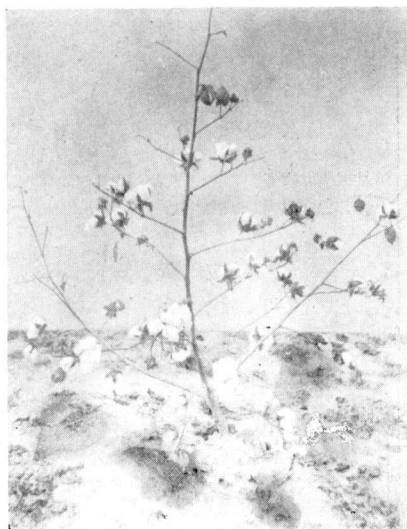
PLATE II.



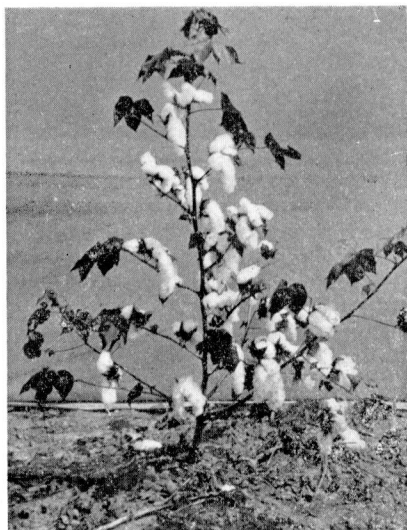
Bancroft Herlcng.



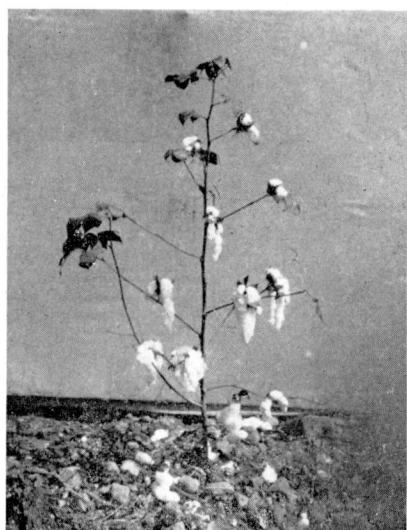
Berry.



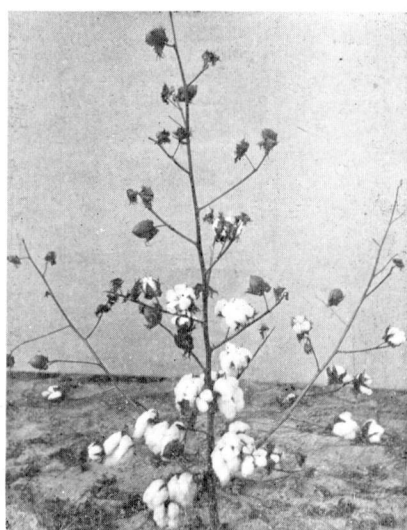
Barnes.



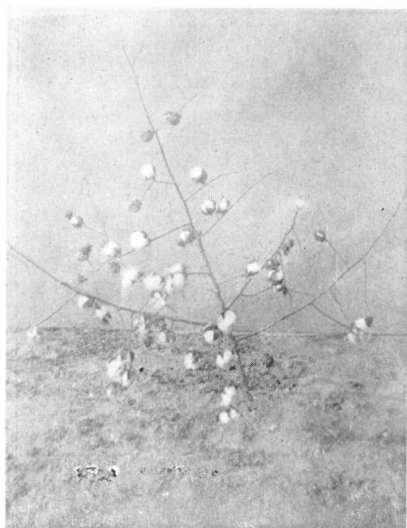
Berryhill.



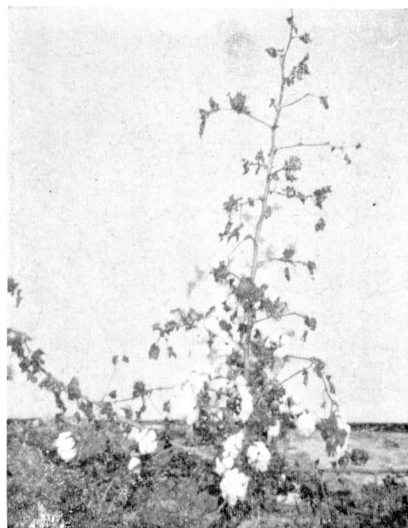
Bingham.



Blue Ribbon.

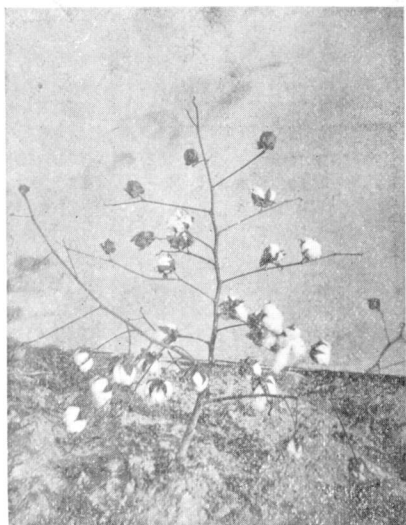


Black Rattler.

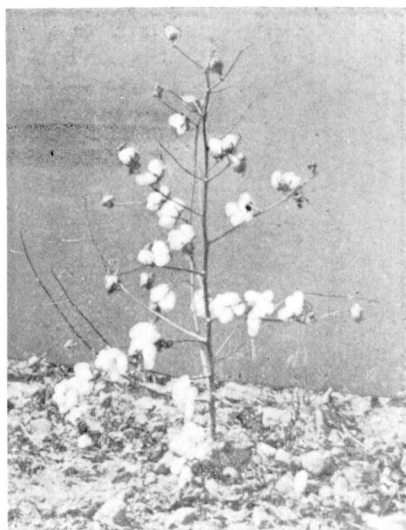


Boyd.

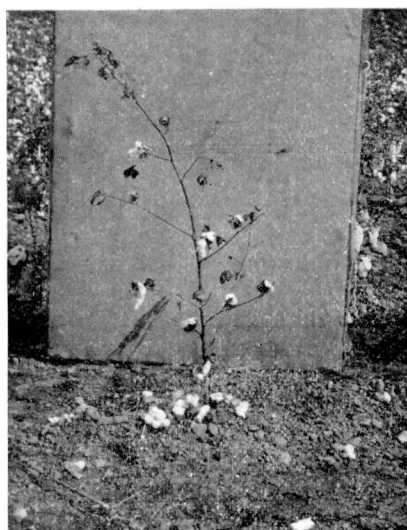
PLATE IV.



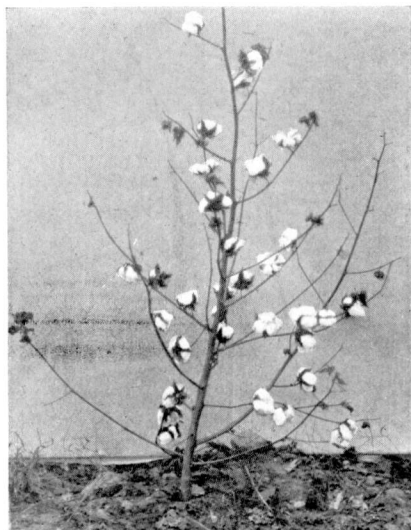
Braddy.



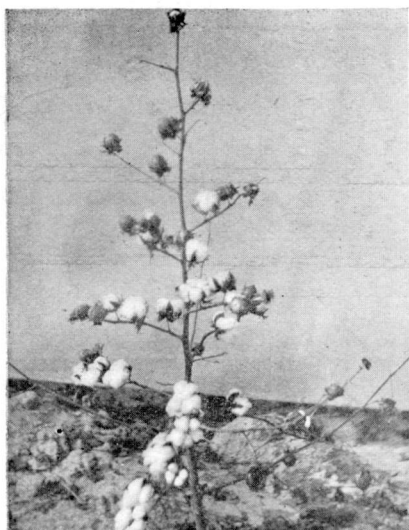
Brannon.



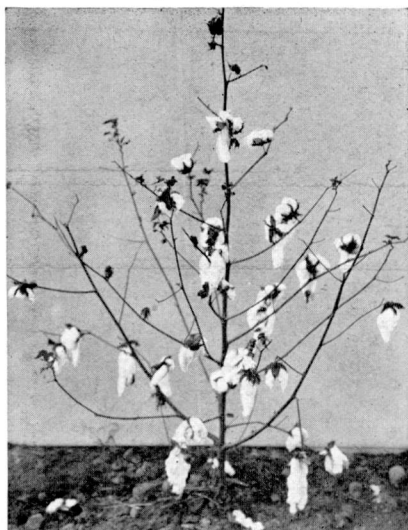
Branch Long Shank.



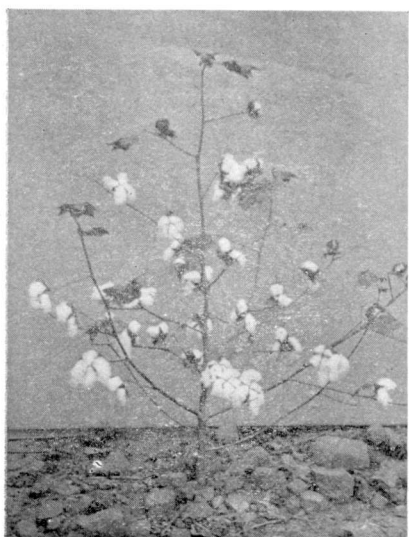
Braswell Cluster.



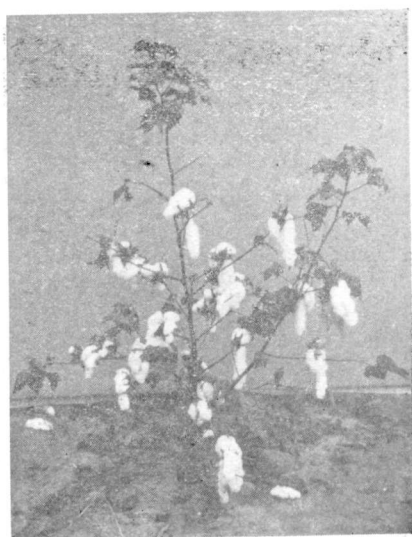
Breedon.



Butler.

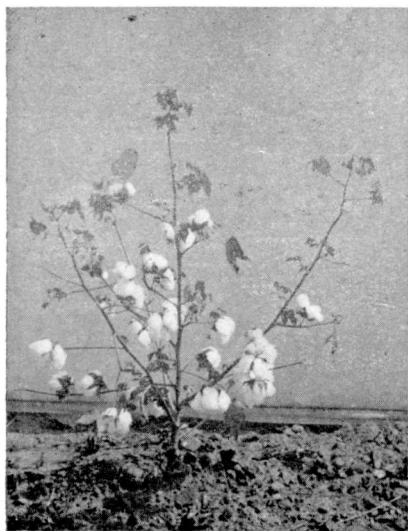


Brown No. 1.

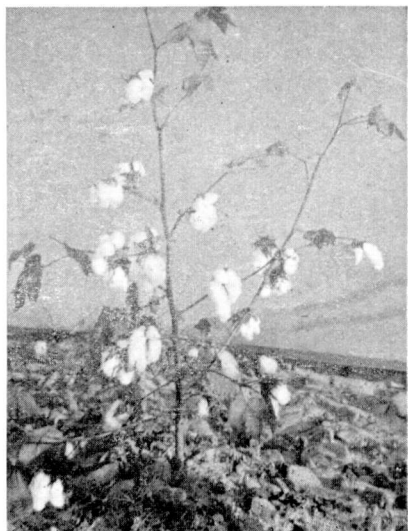


Cameron.

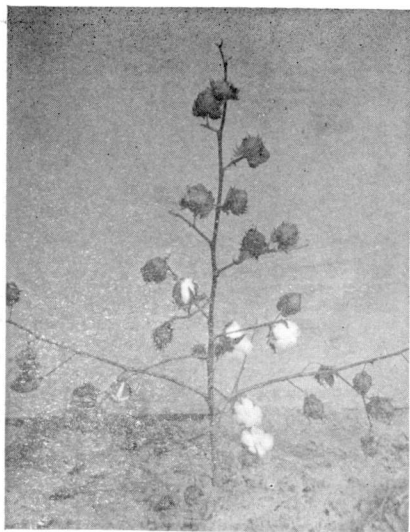
PLATE VI.



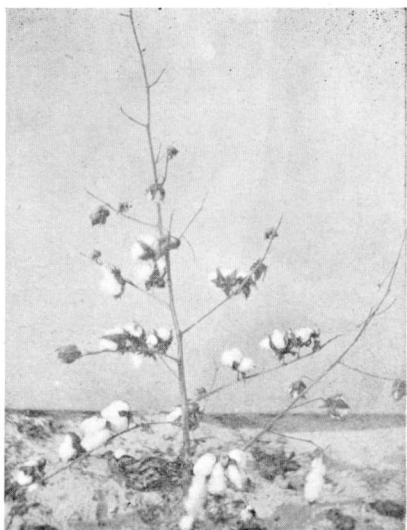
Carolina Queen.



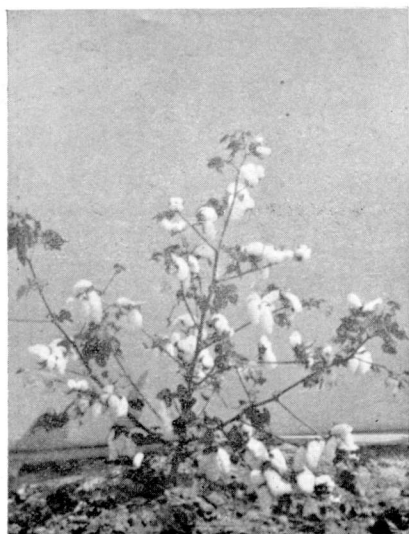
Cleveland.



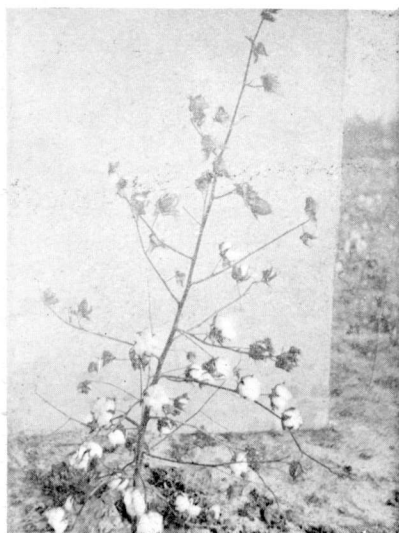
Christopher.



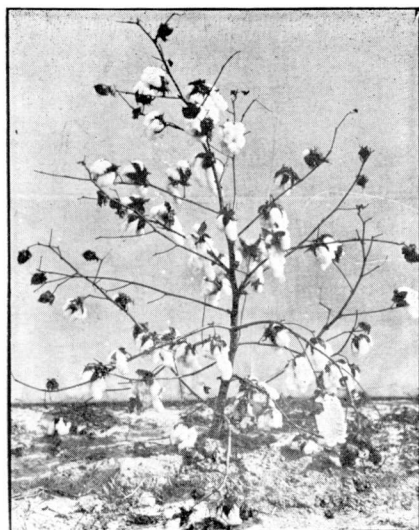
Cliett.



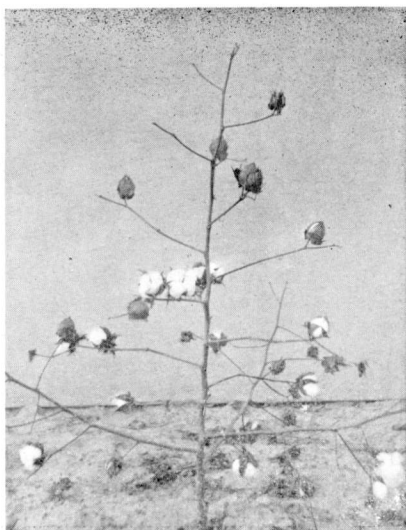
Combination.



Cook Long Staple.

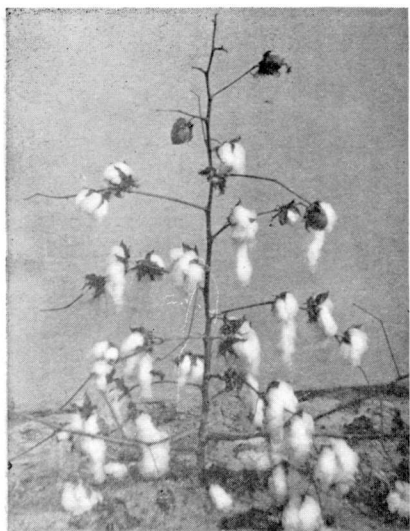


Cook Improved.

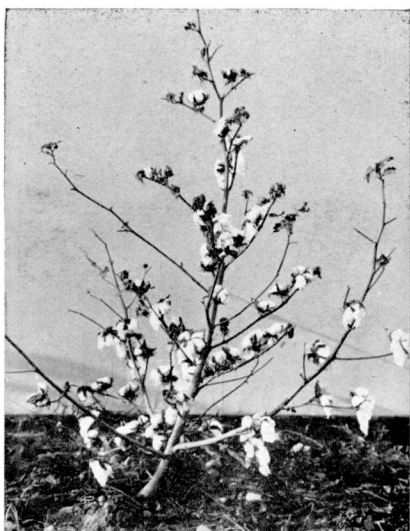


Crossland.

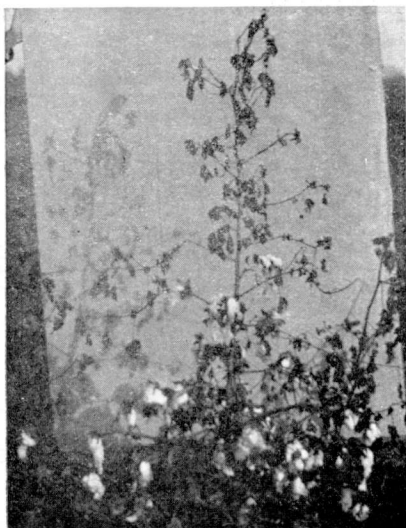
PLATE VIII.



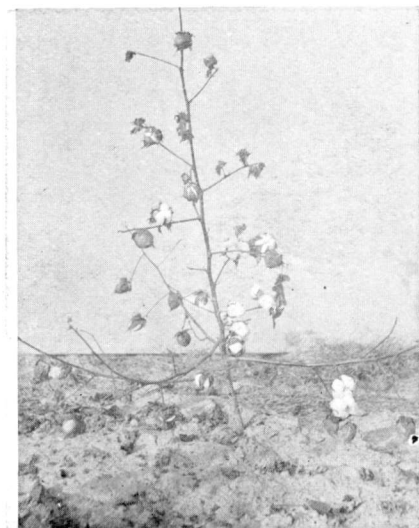
Culpepper.



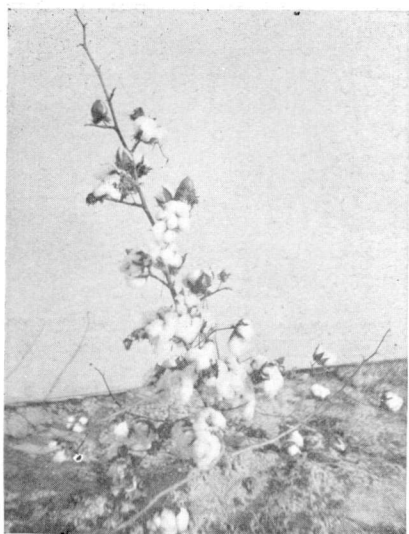
Deñance.



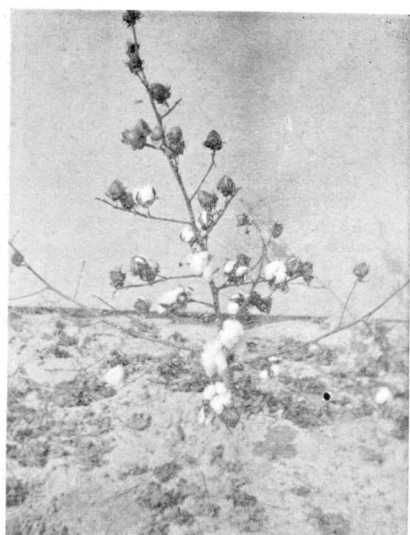
Davis Long Staple.



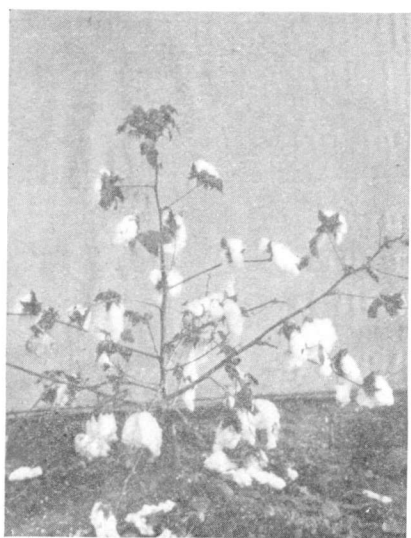
Diamond Six Lock.



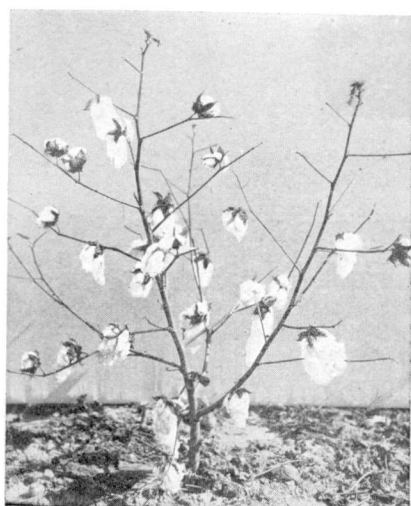
Dickson.



Dongola.

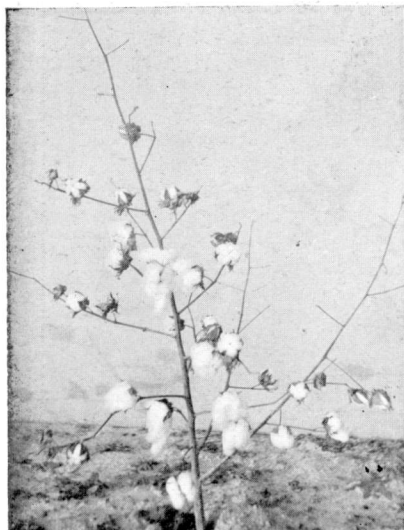


Dixie.

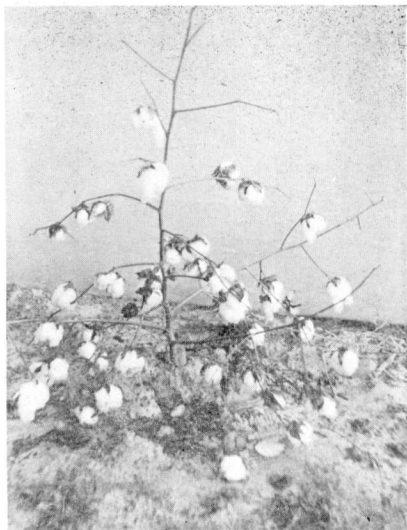


Double Header.

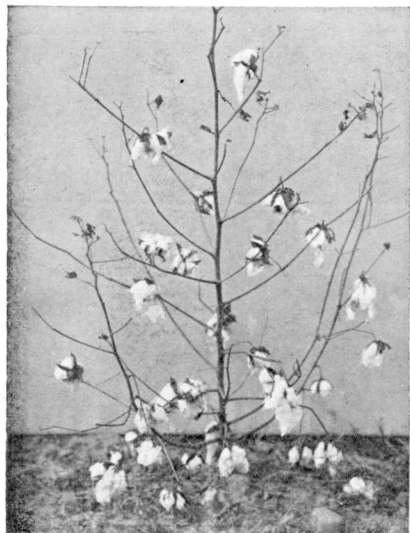
PLATE X.



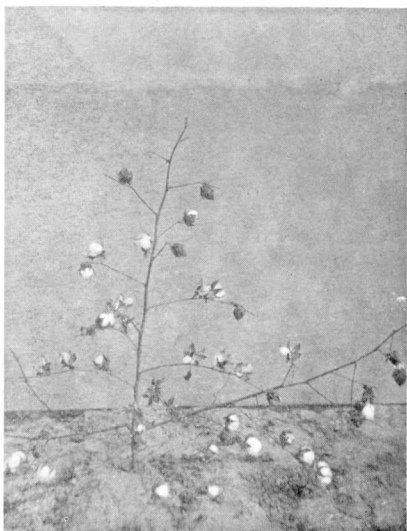
Doughty Long Staple.



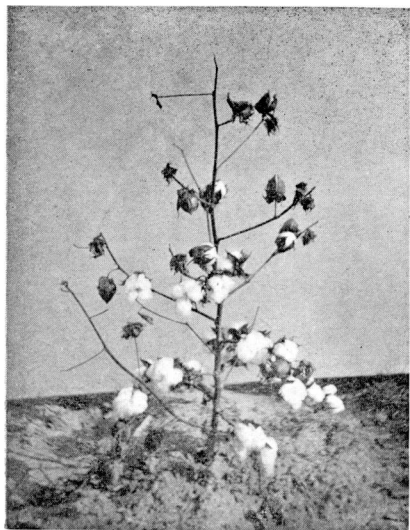
Drake.



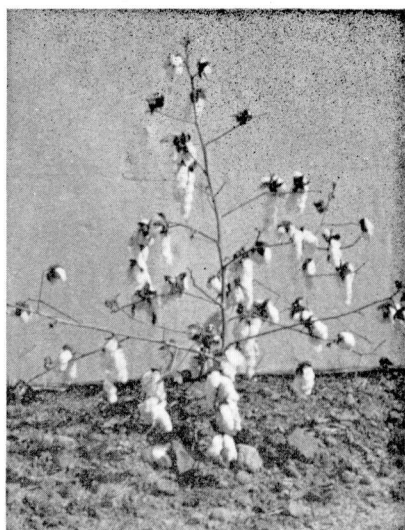
Dozier.



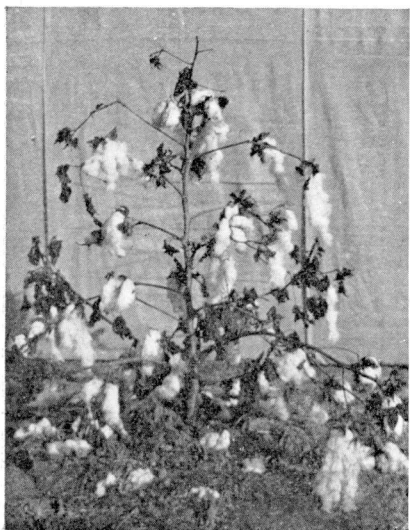
Duncan.



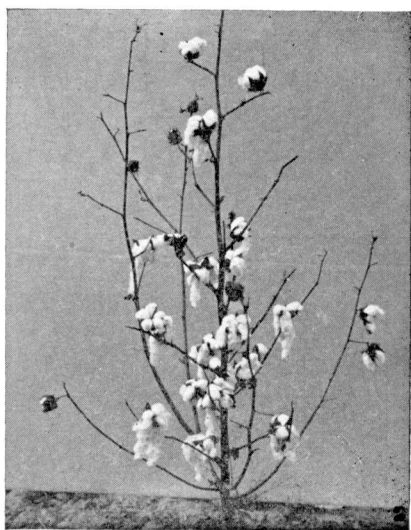
Edgeworth.



Excelsior.

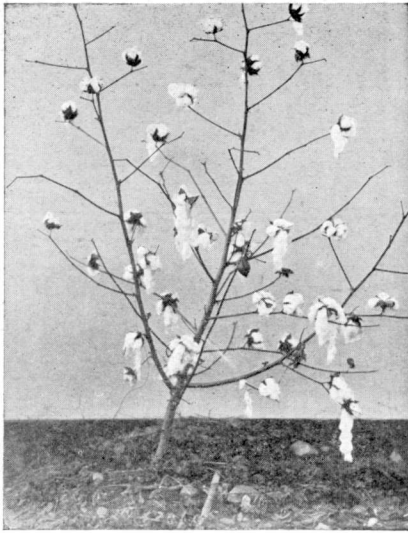


Eureka.

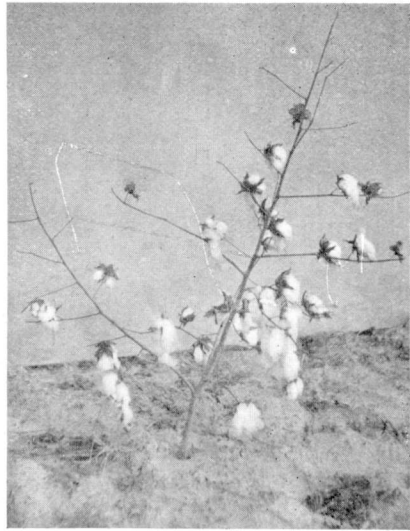


Extra Early.

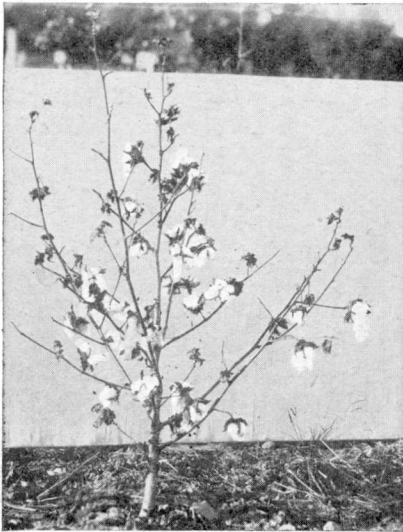
PLATE XII.



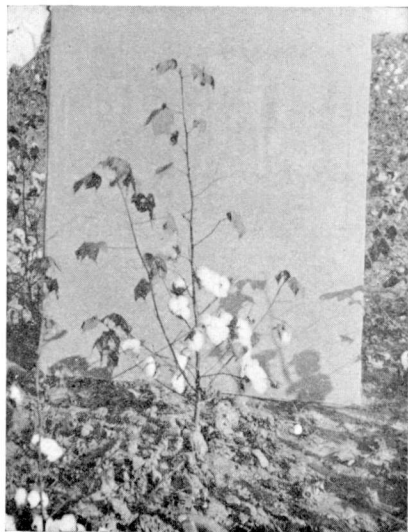
Favorite.



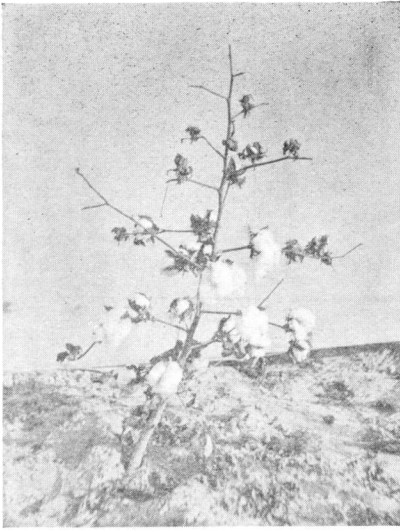
Ferguson Long Staple.



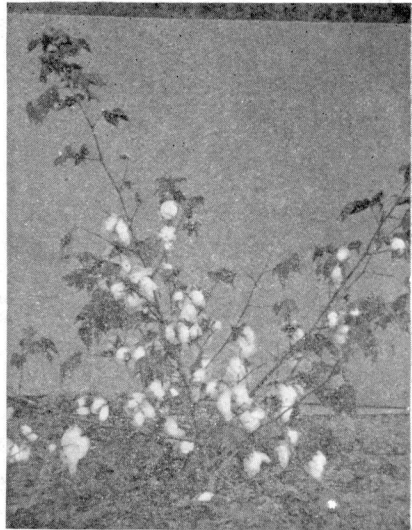
Featherstone.



Florodora.



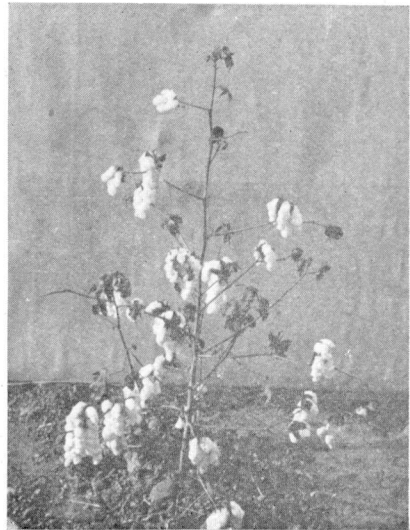
Garrard.



Gholson Long Staple.

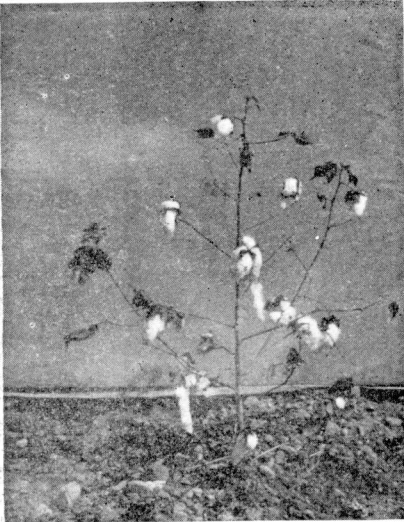


Gayosa Prize.

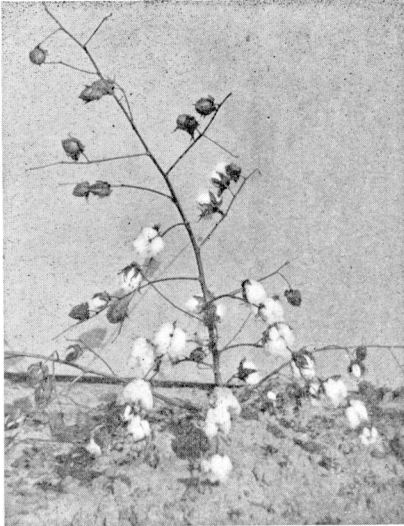


Gold Standard.

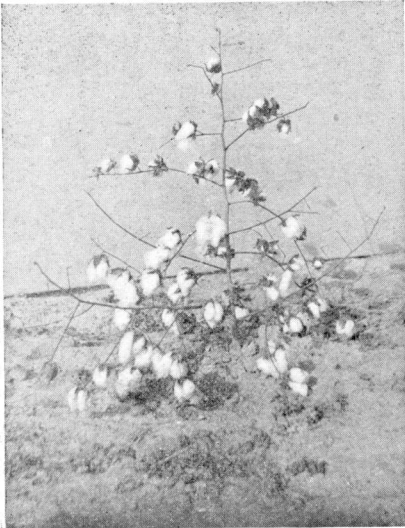
PLATE XIV.



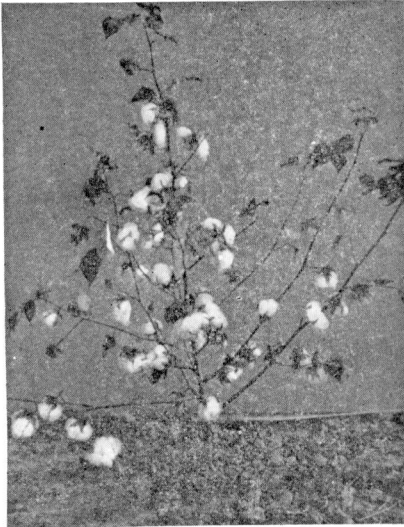
Gregg.



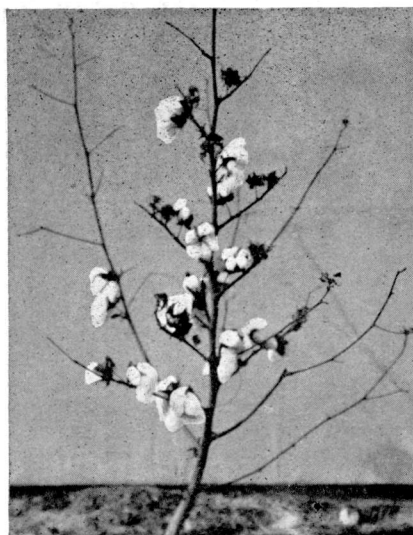
Hagaman.



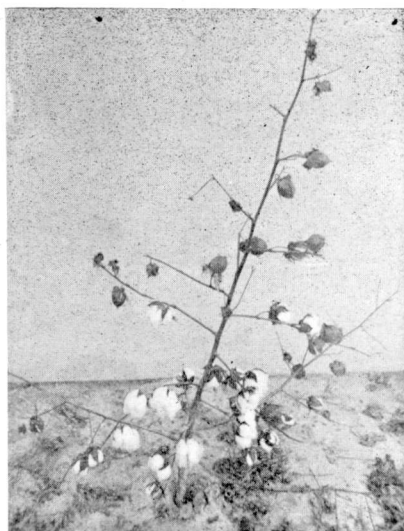
Grier.



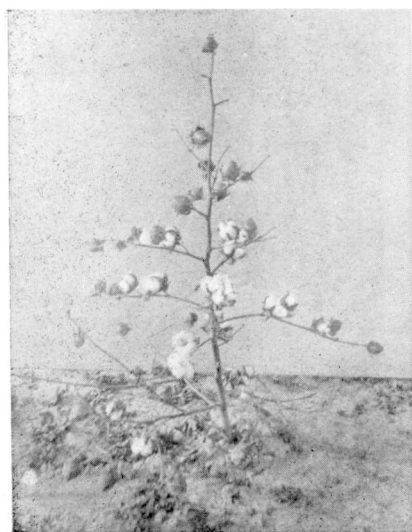
Hawkins.



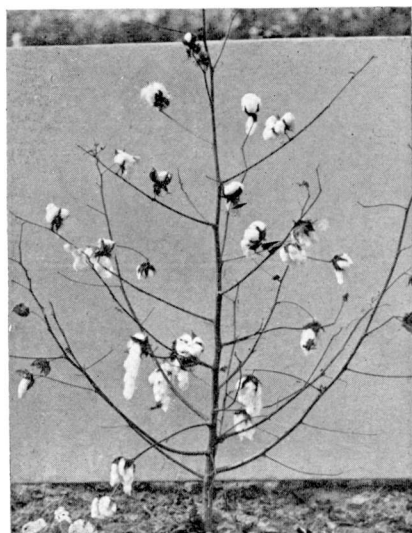
Harden.



Herndon.



Haralson.

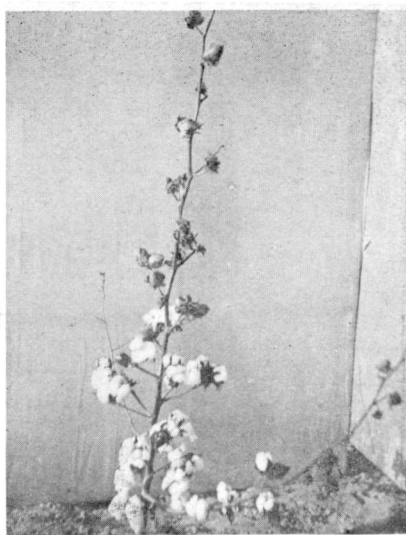


Hodge.

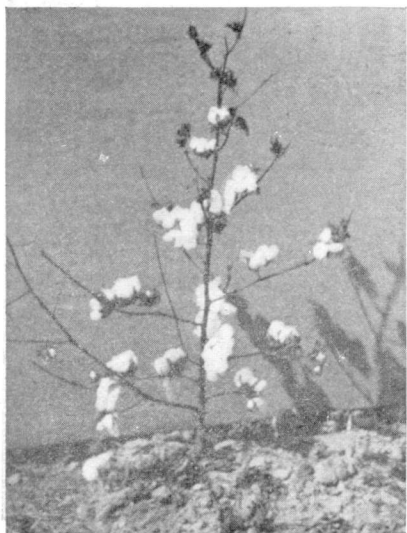
PLATE XVI.



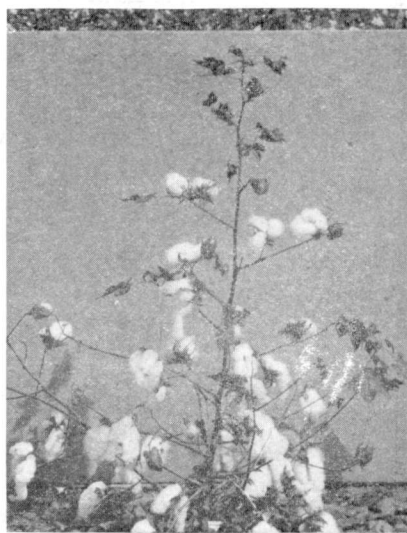
Hunnicuttt Big Boll.



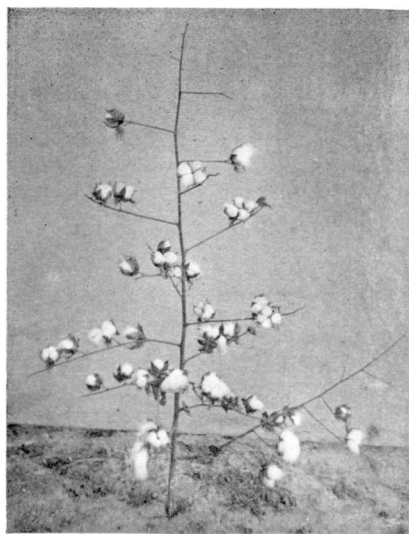
Jackson.



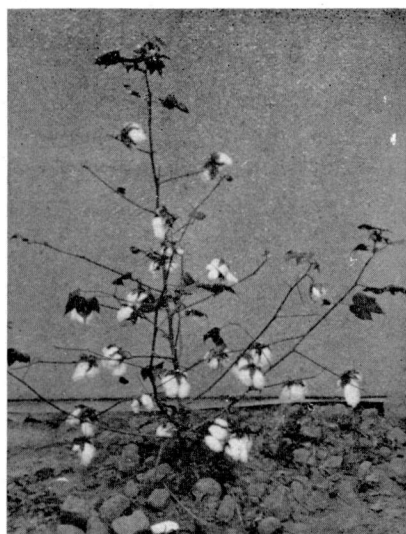
Hutchinson.



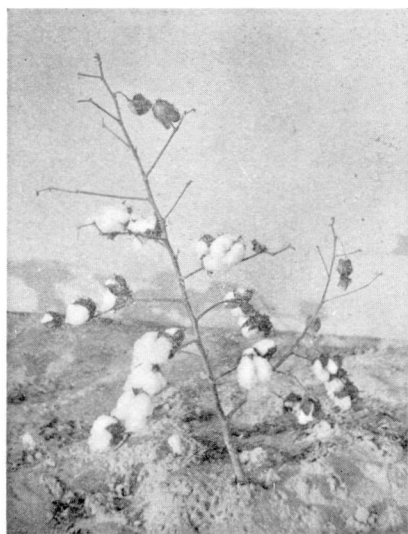
Jones Improved.



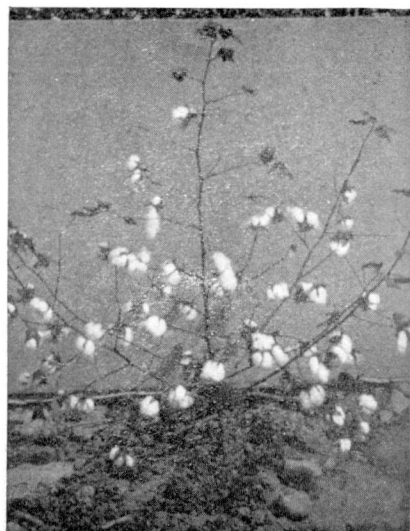
Keno.



King No. 2.

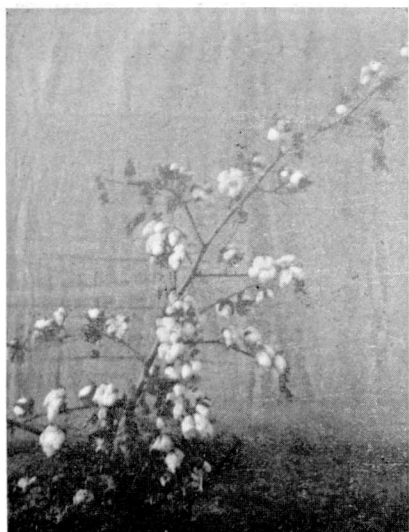


King.

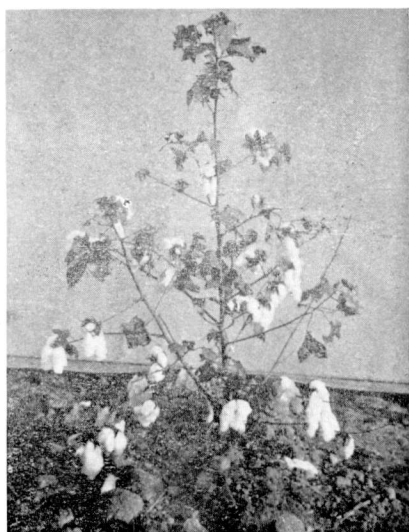


King No. 3.

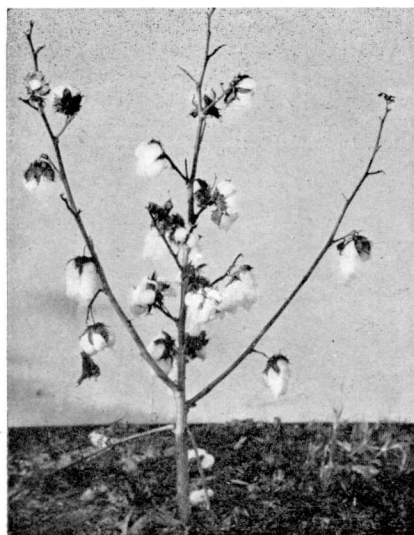
PLATE XVIII.



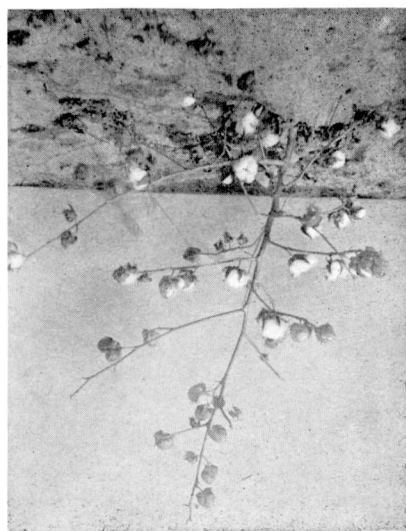
Laclede.



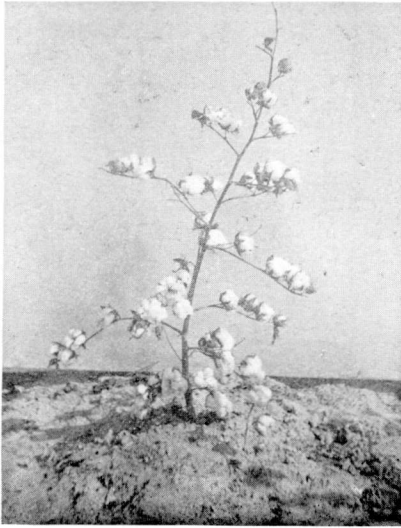
Layton.



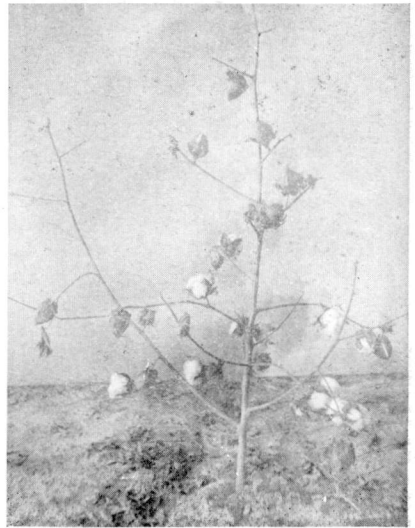
Langford.



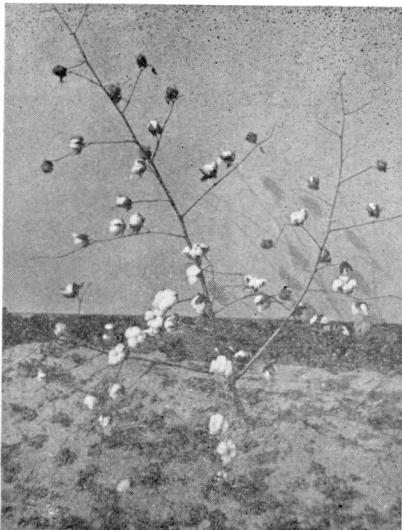
Lealand.



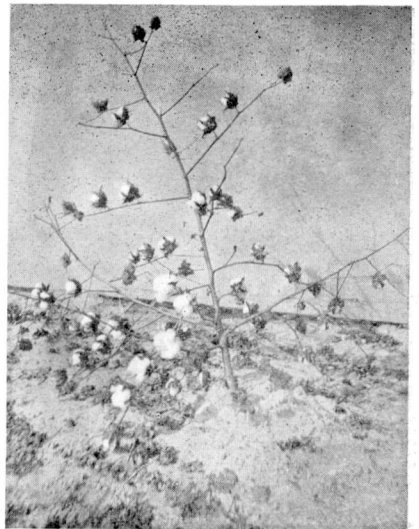
Lewis Prize.



Maddox.

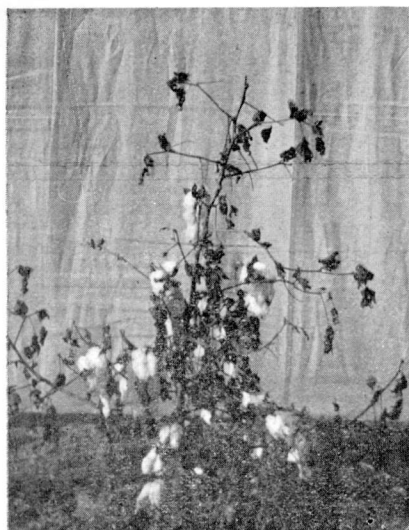


Louisiana.

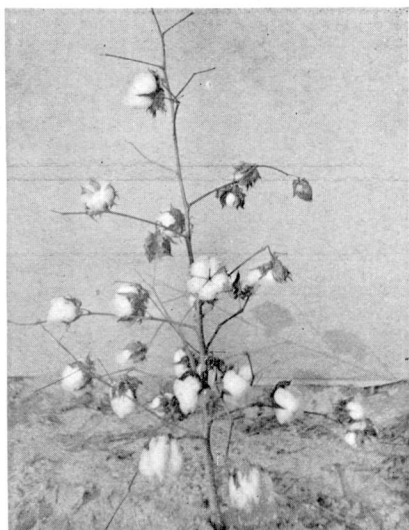


Mattis.

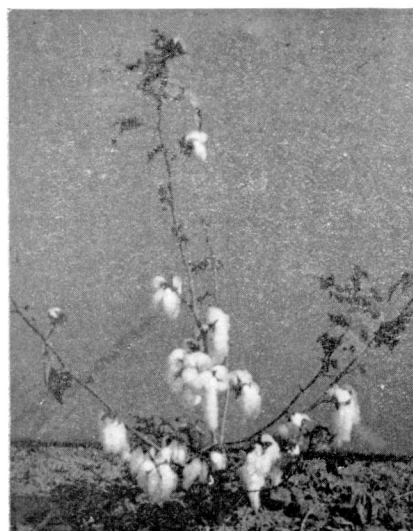
PLATE XX.



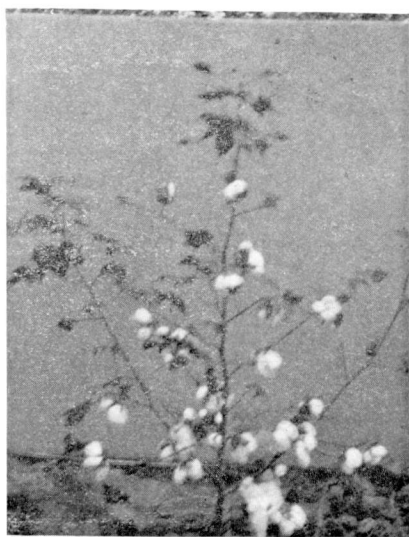
Mascot.



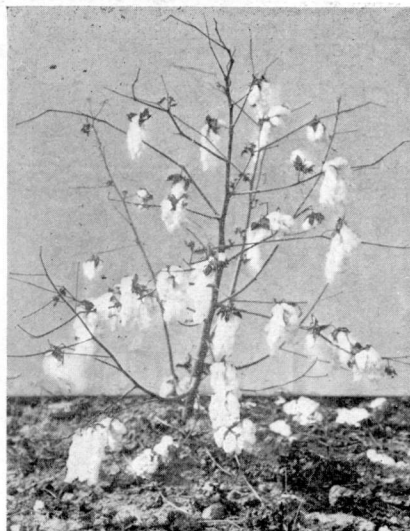
Meredith.



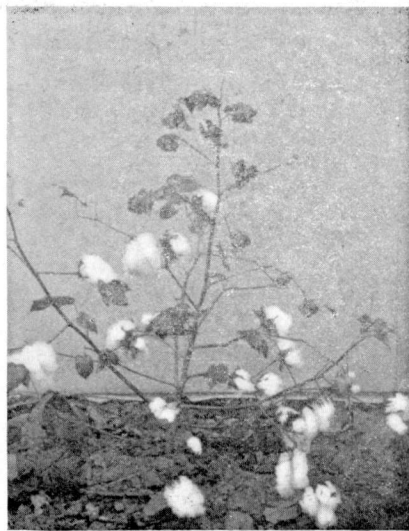
McCall.



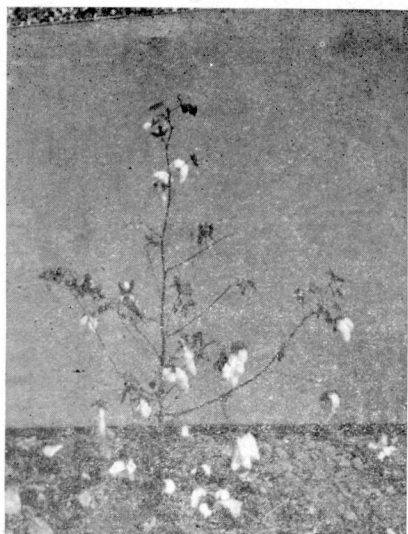
Minor.



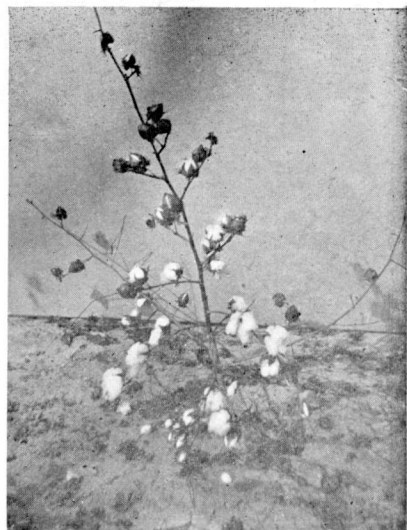
Missionary.



Mortgage Lifter.

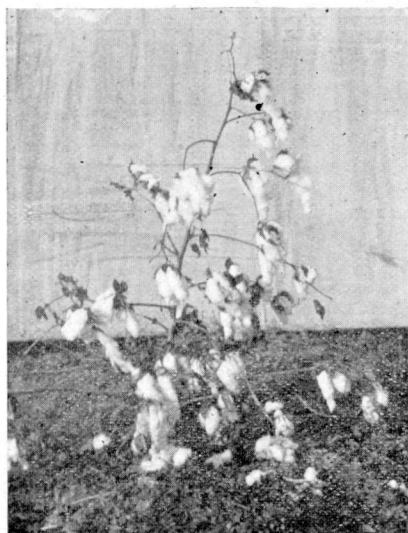


Mitchell.

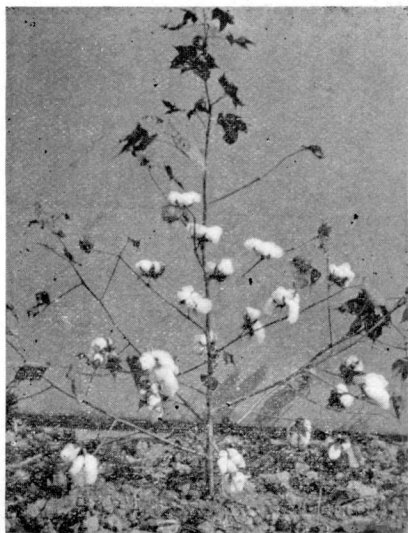


Montclar.

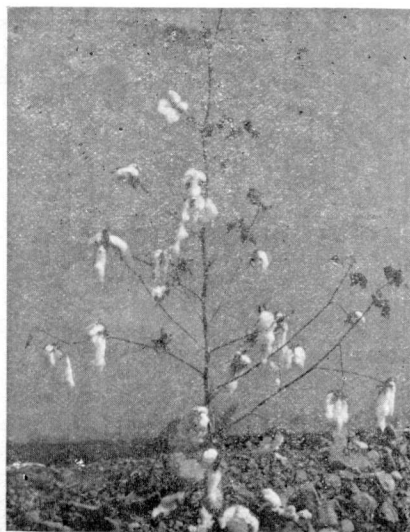
PLATE XXII.



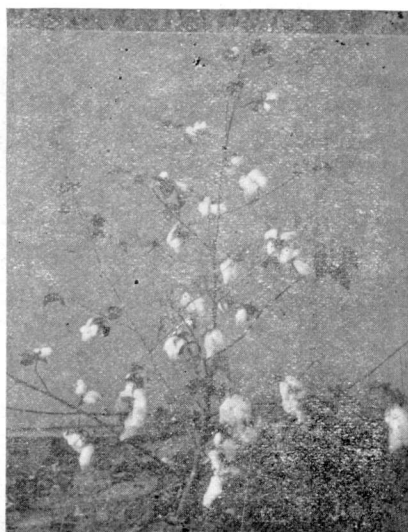
Moss.



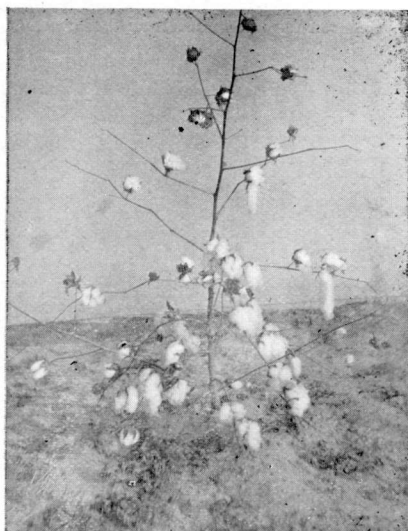
New Century.



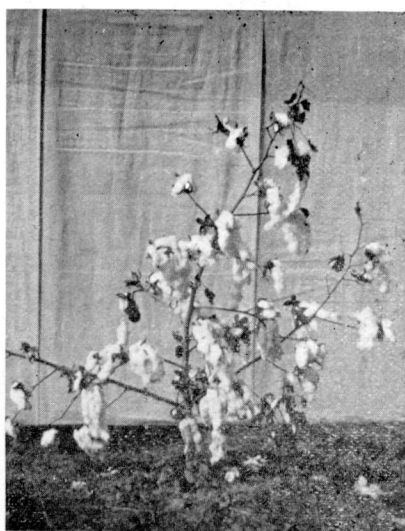
Ozier Long Staple.



Nancy Hanks.



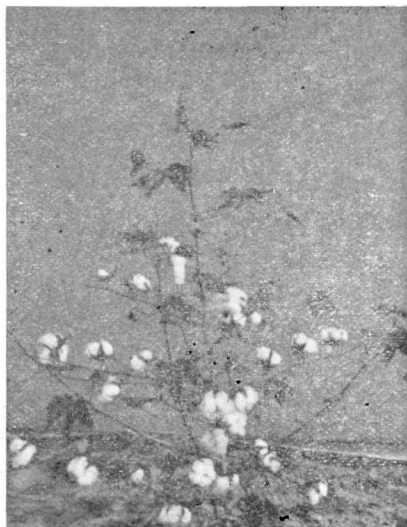
Ozier Starnes.



Peerless.

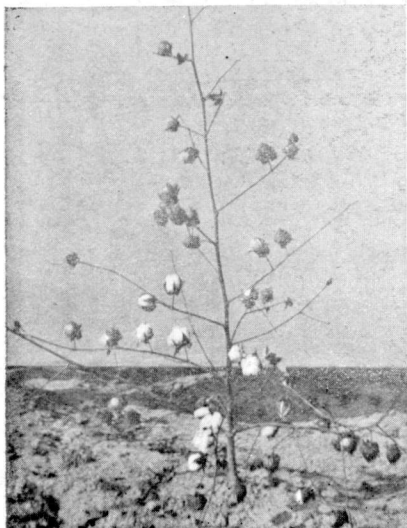


Parker.

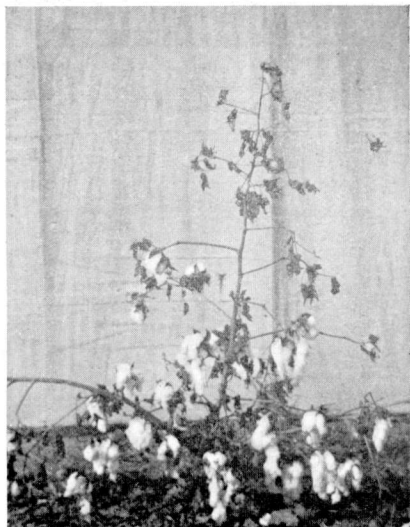


Peterkin.

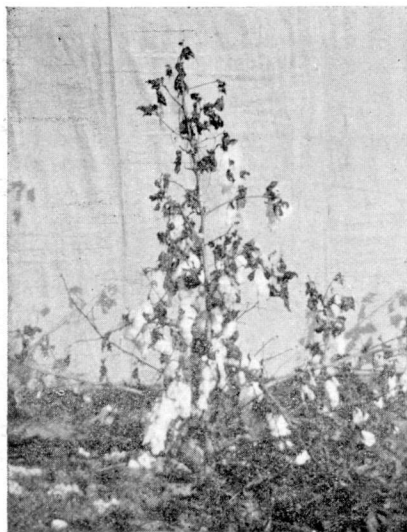
PLATE XXIV.



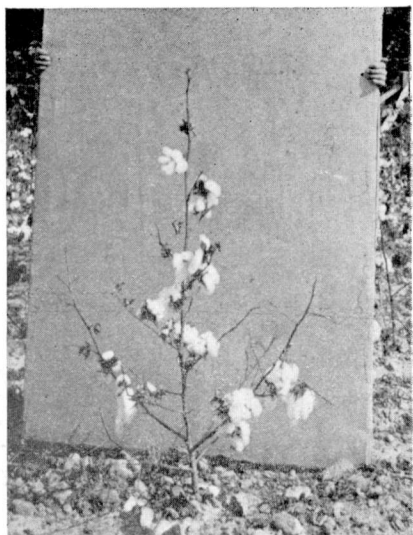
Petit Gulf.



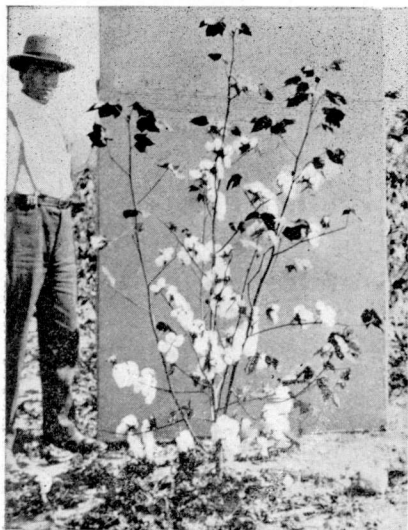
Ptomey.



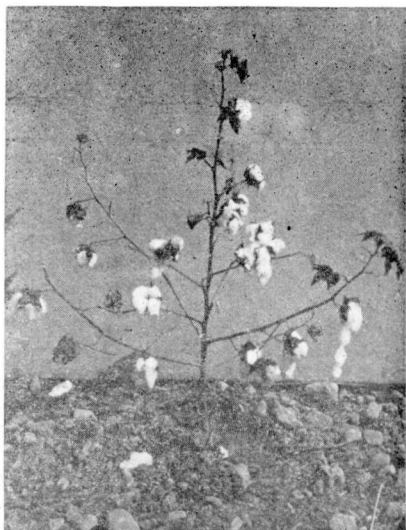
Pride of Georgia.



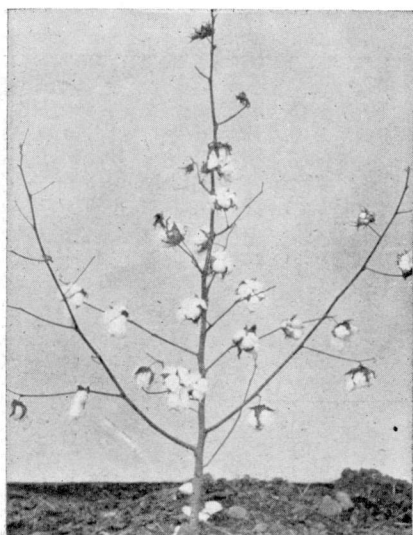
Pullnot.



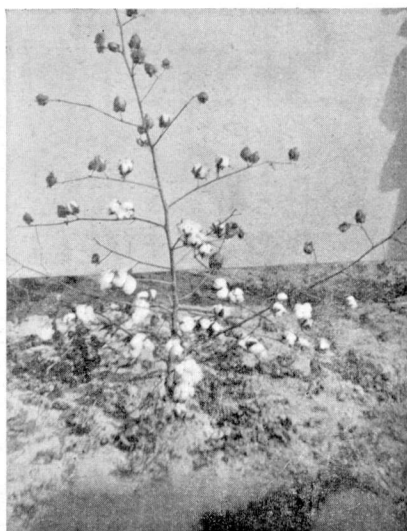
Red Leaf.



Rich Man Pride.

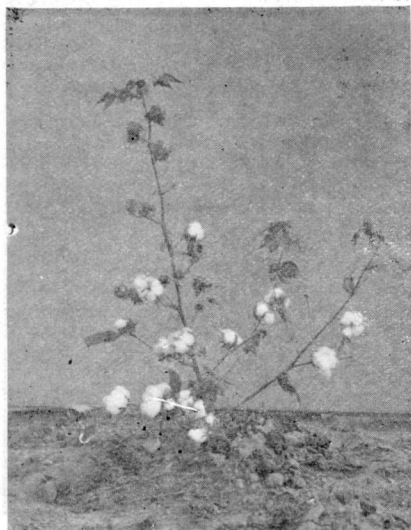


Reliable.

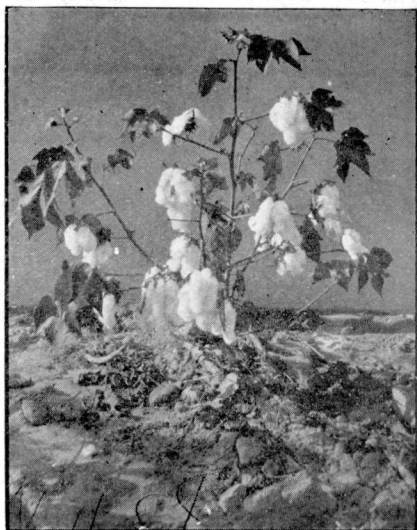


Roby Prolific.

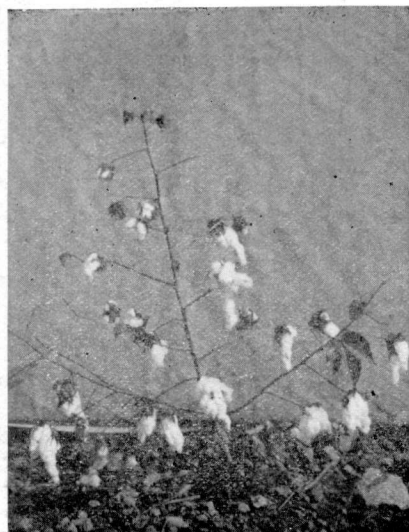
PLATE XXVI.



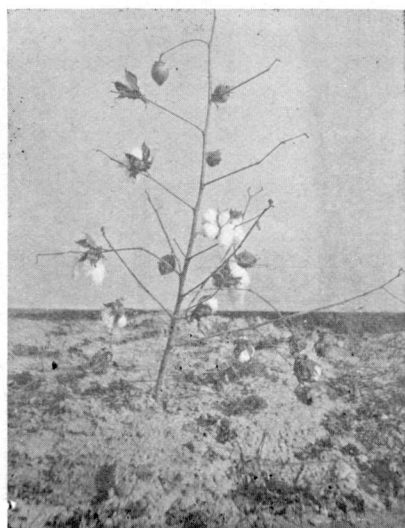
Rogers.



Russell.



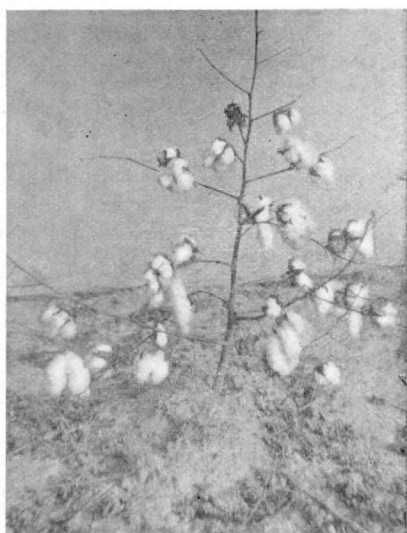
Rosser No. 1.



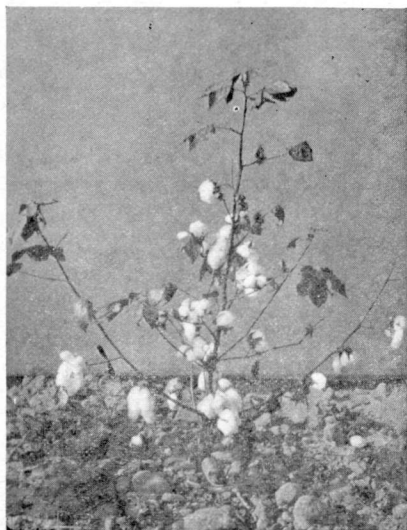
Rowden.



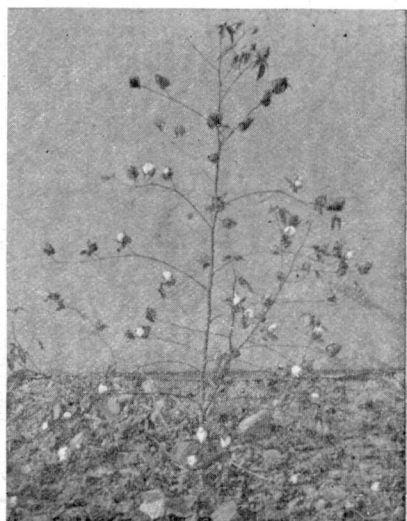
Ruralist.



Scogin.

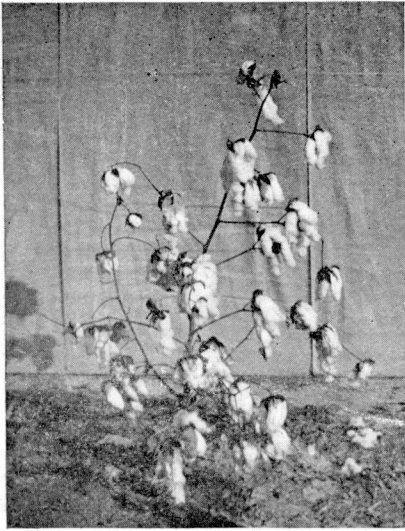


Schley.

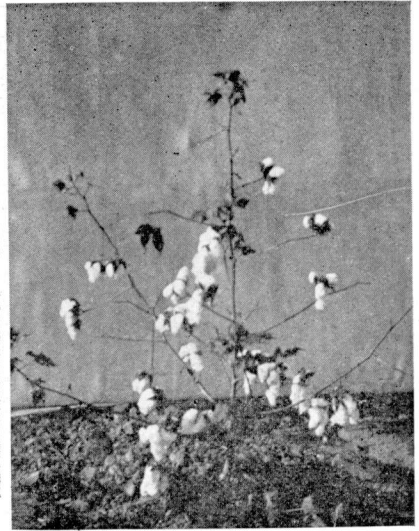


Sea Island.

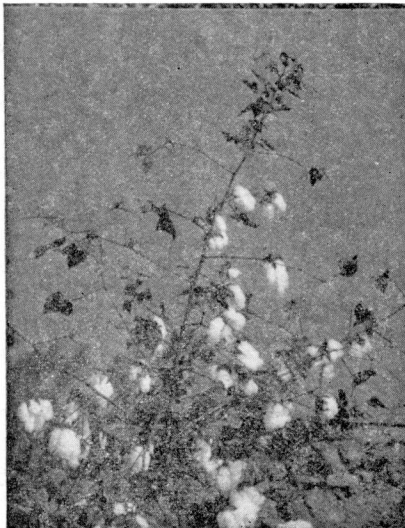
PLATE XXVIII.



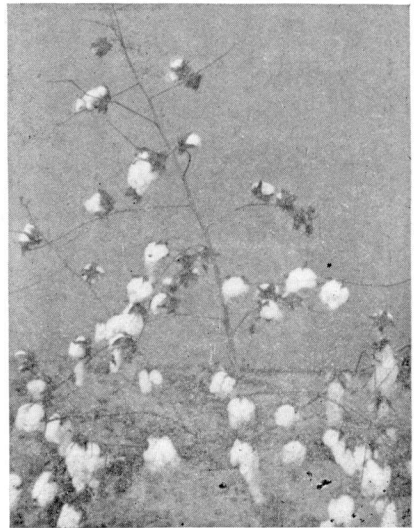
Sewell.



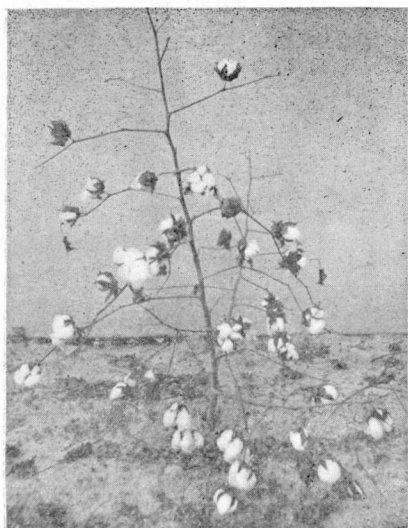
Sistrunk.



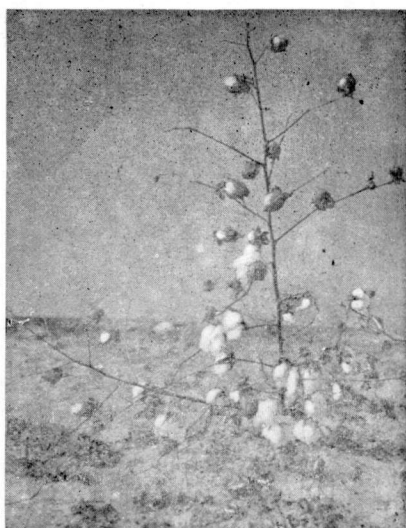
Simms.



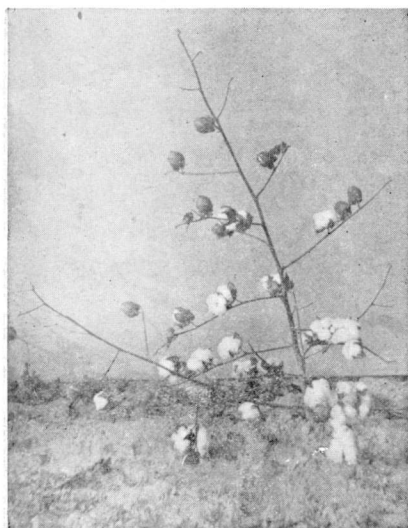
Shine Early.



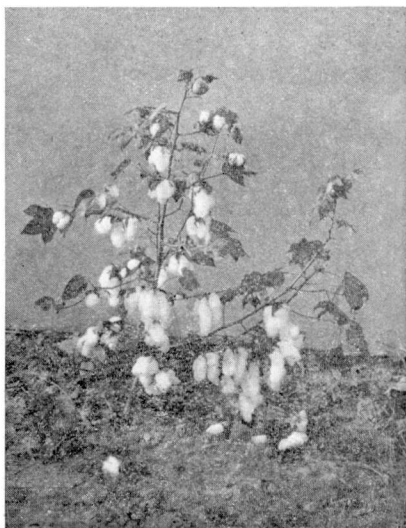
Shine No. 2.



Smith Standard.

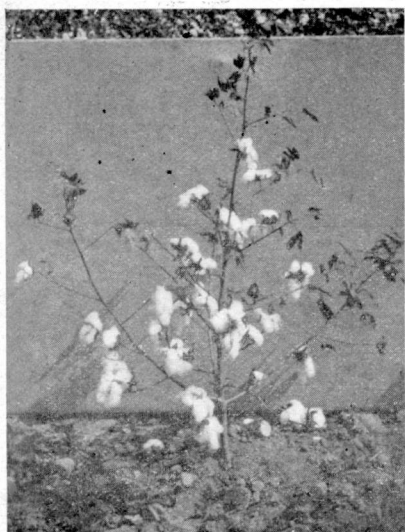


Smith Improved.

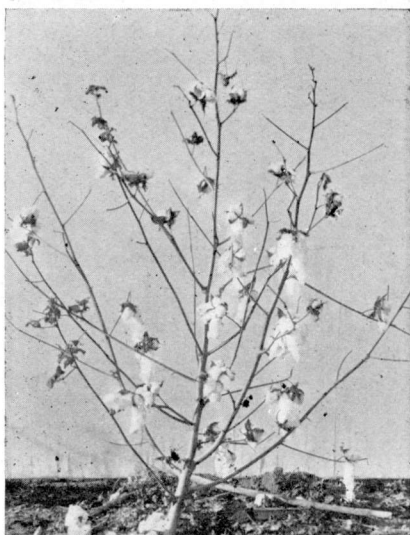


Southern Wonder.

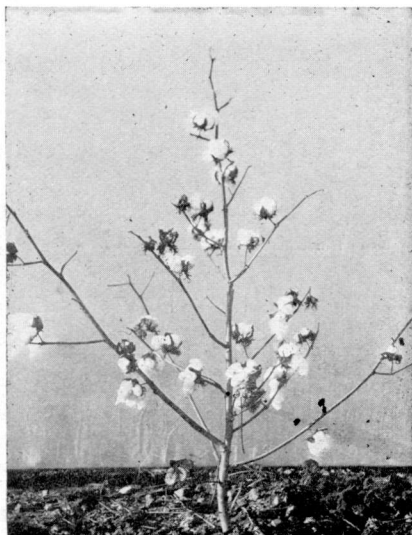
PLATE XXX.



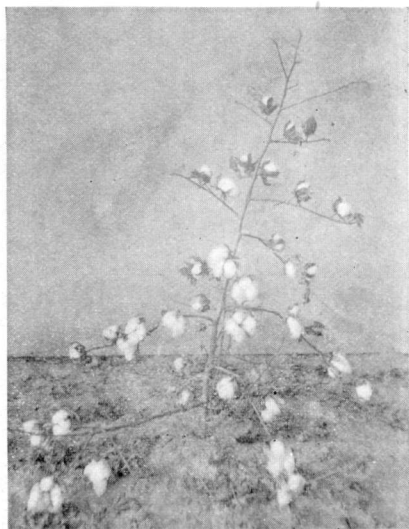
Southern Hope.



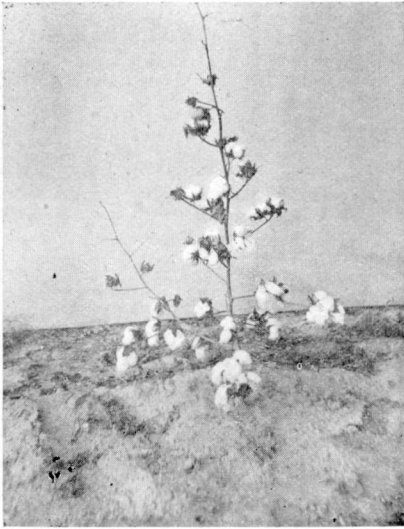
Speight Prolific.



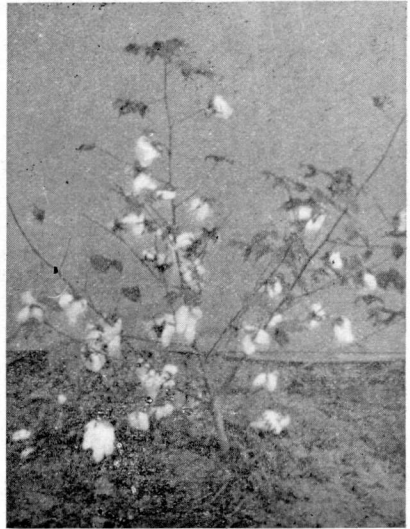
Spearman Choice.



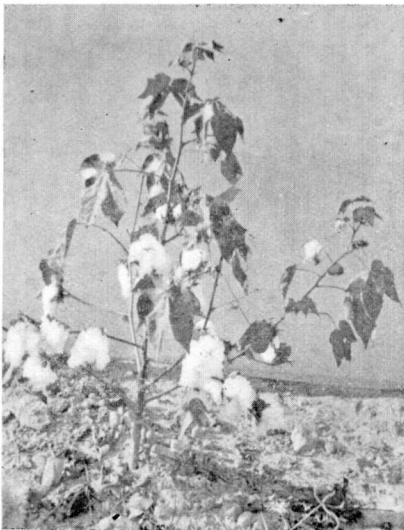
Sprueill Re-Improved.



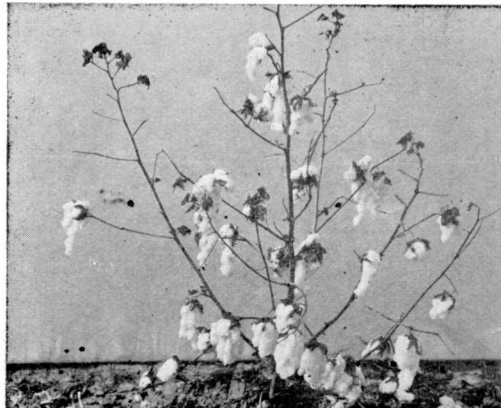
Sterling.



Sunflower.

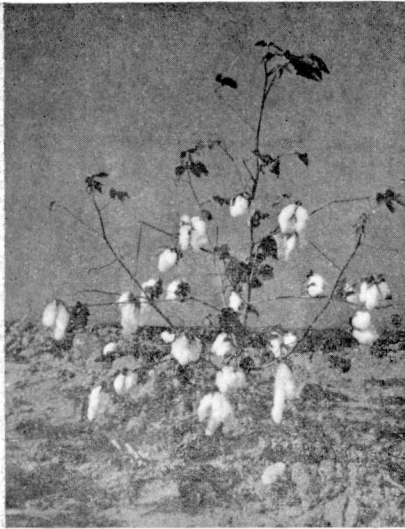


Strickland.

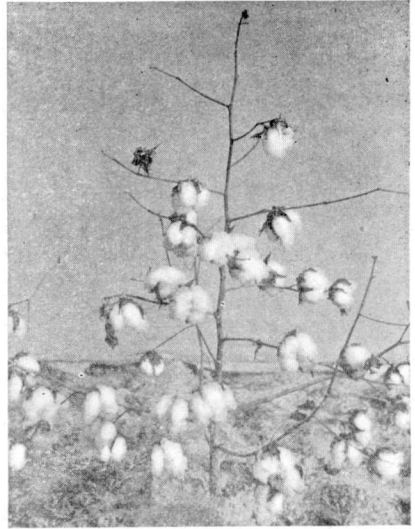


Tatum.

PLATE XXXII.



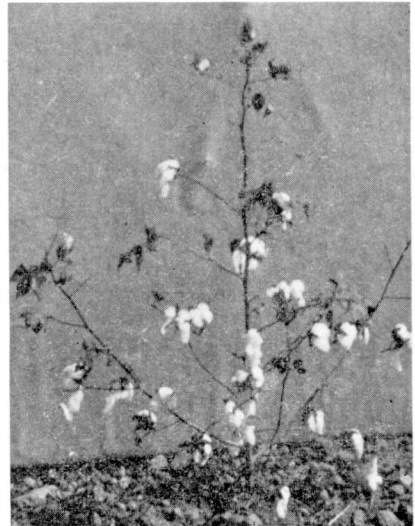
Texas Bur.



Texas Prolific.



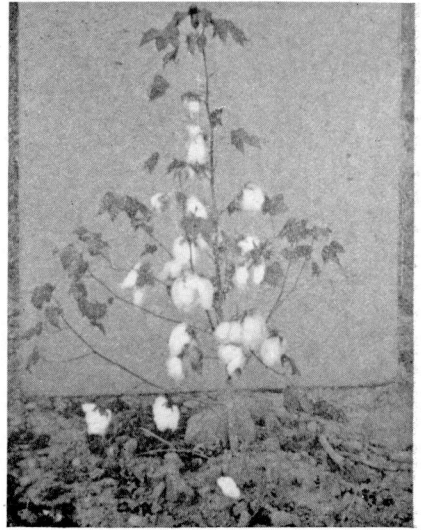
Texas Storm Proof.



Texas Wood.



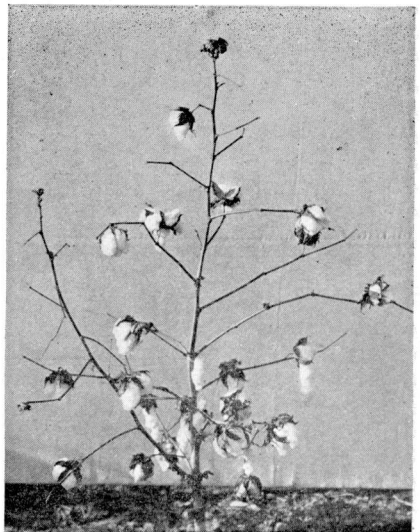
Todd.



Triumph.

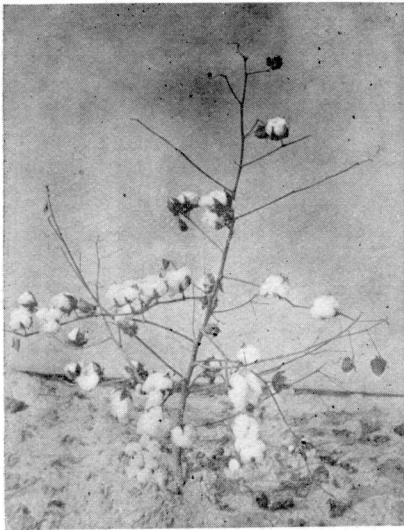


Toole.

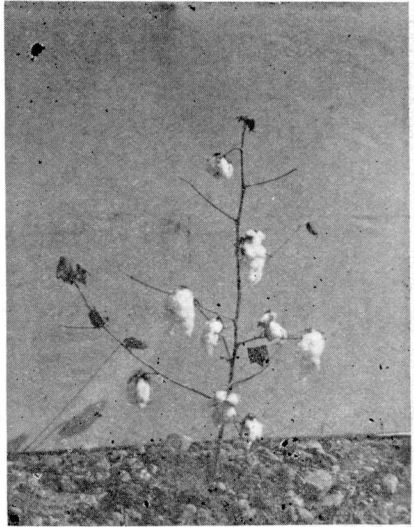


Truitt.

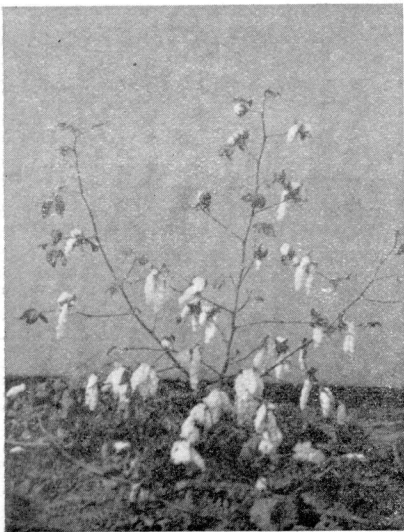
PLATE XXXIV.



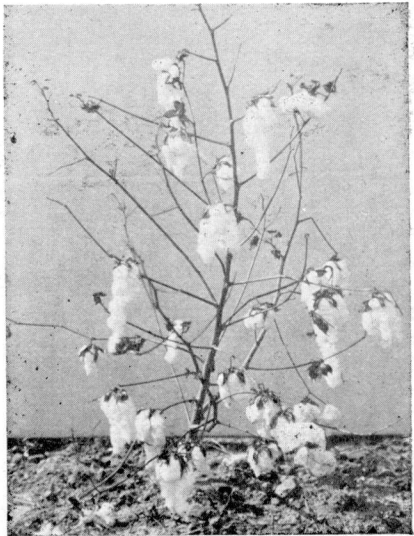
Tucker.



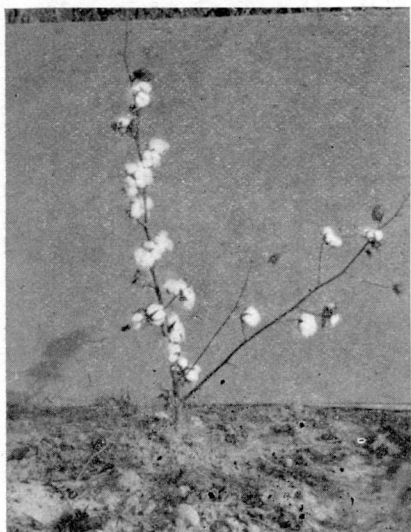
Warren.



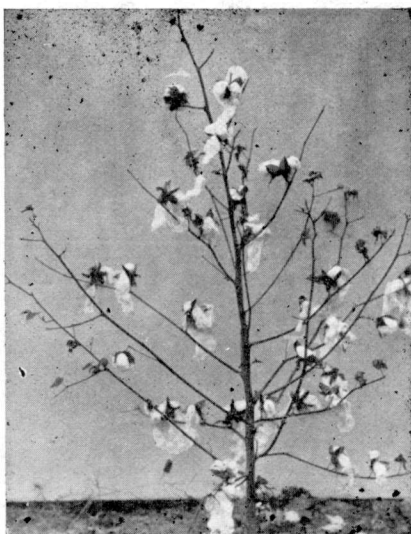
Victor.



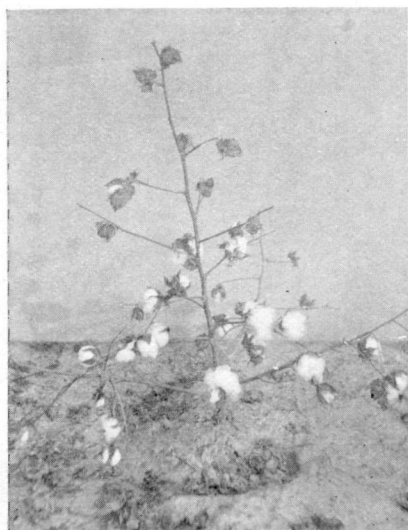
Webb.



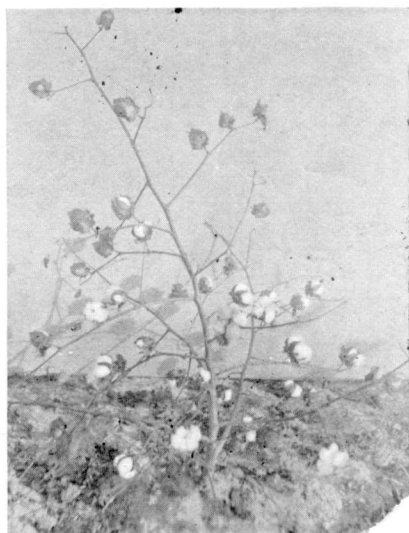
Welborn.



Wilson.



Whitten.



Wise.

PLATE XXXVI.



Woodfin.



Wyche.