AN INDUSTRIAL SURVEY OF MAURY COUNTY, TENNESSEE

by

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PREFACE

The eyes of Industrial America are now turned toward the South, and Tennessee with its vast wealth of natural resources lays just claim to distinguished attention. And yet, while Tennessee is receiving nation-wide attention, the people of the state itself are failing to recognize and utilize to the fullest extent the opportunities which are theirs.

Tennessee ranks high among the states of the nation in water power possibilities; yet it ranks low in water power development. And while many interests are exerting strenuous effort to gain control of the power sites, the people of the State have made no concerted effort to secure the end which shall be for their best interest.

The mineral resources of the State are abundant, and these have not received the attention which their possibilities warrant.

The climatic and soil conditions of Tennessee are propitious to agriculture, and agriculture has been advanced to a prominent position, but little has been done toward the co-ordination of agriculture and industry, - the condition which makes for the ideal state of both agriculture and industry, and ultimately, the best economic conditions.

The University of Tennessee has taken the leadership in the recognition of these opportunities, and a program whose object is to bring about a balanced development of the industrial and agricultural resources of the Commonwealth, and to make the home life and prosperity of its citizenry more happy and constructive, is now being promoted.

This program is being carried out in three ways, namely; - 1. Through the work of the Experimental Stations, one of which is located in Maury County, and the county agents. 2. Through the influence which is exerted by the professors of the various departments of the University

who make periodical visits to the cities of the State to help the people of these sections meet the problems with which they are immediately concerned. And 3. Through the influence which the University exerts by urging its graduates and students to return to their own homes, and there to put into practice those principles which they have learned at the University.

An effort is also being made to have the students collect facts and data in regard to their home communities in connection with their regular work in the University when this is practicable. The present thesis is a result of this influence, and herein is recorded information and data which, it is hoped, will be of practical value to the citizens of Tennessee and particularly, those of Maury County.

An effort has been made to gather only such information and data as will be acceptable to outside interests who may wish facts upon which they may base conclusions safely, and as will more adequately acquaint the people of Maury County with their resources and possibilities. In doing this the United States Census Reports, the Agricultural Census Report of Tennessee for 1925, the Soul Survey of Maury County, the Economic Survey of Tennessee by Prof. C. E. Allred of the University of Tennessee, the Water Power Resources of Tennessee, various public documents issued by the state departments, and other reliable sources have been consulted freely.

HISTORY

People and Settlements

"Maury County was erected Nov. 24, 1807 from a part of Williamson County and was named in honor of Major Abram P. Maury. It is one of the best counties in the state.

"The first county court was held at the house of Col. Joseph Brown, about three miles south of Columbia. He was licenced to keep an 'ordinary' and gave bond to furnish 'good, wholesome, and clean lodging and diet for travelers, stabling with hay, oats, corn, fodder, and pasturage, as the season of the year may require, and not to suffer or permit gambling, nor on the Sabbath day permit any person to tipple or drink more than necessary.'

"The first paper, The Western Chronicle, was founded in 1811 by James Walker, who married a sister of President Polk in 1813.

"The early settlers in Maury County came from North Carolina and Virginia. Attention to this county was brought early and particularly because of the location there of 25,000 acres given General Nathaniel Greene because of his services in the Revolutionary War.

"One of the earliest colonies, however, came from South Carolina in 1807 and in 1808, led by John Dickey and settled in the Zion Church neighborhood.

"Not far from Mt. Zion was the Polk settlement. From the first settlers, in 1807, William Dever and his sister, William Polk bought their 5,000 acre grant. He divided the estate among his four sons, Bishop Leonidas Polk, Lucius P. Polk, George N. Polk, and Rufus K. Polk. This became known as the 'Polk Neighborhood'. Near it was the home of Gen. Gideon J. Pillow.

"Another prominent settlement was the Spring Hill community which

was settled about 1808-10.

"Few counties have been so prolific in prominent, noted, and great men. Among them were President James K. Polk, Gen. Felix K. Zollicoffer, Gen. Ewell Stanley Matthews, Matthew Fontaine Maury, Henry F. Cooper, A. P. Nicholson, William Fields, Bishop Leonidas Polk, Bishop Otey, Gideon J. Pillow, Terry H. Cahal, William Polk, Thomas Wrenne, Maj. James Holland, Dr. Samuel Mayes, James Armstrong, a member of Lee's Legion, David Matthews, who served under General Francis Marion, General Richard Winn, Edward Ward Carmack and many others."[1]

NATURAL CONDITIONS

"A superficial view of the county so settled would present the picture of a section of a river valley, running almost due east and west, with the dip to the west, and fringed to the north and south by smaller valleys which furrow the sides of irregular ranges of knobs and hills which lie along the northern and southern boundaries. To the west these hills broaden out into what is known as the 'Barrens', forming a part of the Highland Rim. The bed of this valley is occupied by the Duck River, which flows through the whole extent of the county, dividing it almost equally. The river was much used formerly for flat-boats and barges. It is still much used in floating out rafts during high waters.

Location

"Maury County is situated in the south-central part of the State of Tennessee, about forty miles south of Nashville. It is somewhat rectangular in outline, having an average length east and west of approximately, twenty-six miles and a mean width north and south of about twenty-two

[1]"Counties of Tennessee" by Austin P. Foster - State Librarian and Archivist

miles. It contains 618 square miles, or 395,520 acres. Maury County includes two main physiographic divisions: (1) the basin or low division (part of the Central Basin region), and (2) the Highland Rim or high division. Between these divisions the slopes are characteristically steep, in places having so many rock ledges as to be unfit for cultivation, and elsewhere deeply mantled with soil and suited to be cultivated.

"The Highland Rim surrounds the Central Basin. Large areas which have not been eroded show a flat, often poorly drained surface. Areas of this kind appear in Coffee, Warren, Robertson, Lewis, Lawrence, and Dickson Counties. The general elevation of this highland is about 1,000 feet. On the edges of the rim, approaching the Central Basin, erosion has developed steep, precipitous slopes and many ridges, some of which are still connected with the larger flats, while others remain as outlying isolated ridges or hills.

"Maury County is situated in the extreme western extension of the Central Basin and contains a considerable area of Highland Rim country. The region is for the most part, gently rolling to undulating; areas of slightly modified flat topography are, however, developed to the west of Columbia toward Mt. Pleasant and Mt. Nebo Hill, and from Spring Hill toward Jameson and Darks Mill. These areas probably owe their plain profile to a period of repose in the uplift of the middle Tennessee dome, at which time Duck River was cutting its broad valley. Much of the original or terrace formation has been destroyed, however, by subsequent erosion, and it now appears as gently rolling to rolling country. Where there is considerable variation in the character of the rock formations, such as exists in the vicinity of Scribner, the sandstone being exposed, weathering has proceeded very unevenly and the topography is regular and in places, rough to broken. Several hilly areas occur within the Central Basin part of the country, remnants of which overlie cherty formations

of the Highland Rim. There are many spurs and main ridges which are connected with the old plain of the rim country. Small flat areas of the Highland Rim are found in this county. The largest area is developed in the southwestern part, and is an extension of the 'flatwoods' area of Lewis County. In the northwestern part of the county there are narrow flats on the divides between Leipers and Snow and Lick Creeks. The old Natchez Trace follows one of these flats for many miles."[2]

Drainage

"Maury County is drained to the west through Duck River and its tributaries, with the exception of a small area southwest of Rockdale and a similar flat northwest of Water Valley. The surface drainage is adequate and in places excessive. Nearly all the streams have deep cut channels, and consequently, are bordered by bottom lands that are narrow and seldom overflowed. In the eastern part of the county, particularly in the glade areas, drainage is for the most part underground, the waters sinking through crevices in the rocks. Very few springs are found in this section of the county, the water supply for the farms being obtained from wells or surface points. In other parts of the county, however, springs, creeks, and branches are numerous."[3]

Climate

"The climate of Maury County, like that of the whole Central Basin in Middle Tennessee, is mild. The winters are usually broken, extremely cold weather lasting only a few days. The summers are long, though not oppressively hot. The mean winter temperature is 40.4 degrees F., with

[2]Soil Survey of Maury County, Tennessee - U. S. Department of Agriculture, Bureau of Soils, in co-operation with Tennessee Geological Survey
[3]Ibid

extremes of -13 degrees F. and 79 degrees F. The mean temperature for the summer months is 77.1 degrees F., the absolute extremes being 42 degrees and 104 degrees F. The mean annual temperature is 59.3 degrees F. Fairly uniform conditions prevail over the entire county, as there are no marked topographic features to cause local variations.

"The average annual precipitation is 48.49 inches. The total precipitation for the driest year recorded is nearly 33 inches, and that for the wettest year about 67 inches. The rainfall is well distributed throughout the year and favorable for agriculture, being lightest during August, September, and October.

"The average date of the last killing frost in the spring is April 1, and that of the first killing frost in the fall, October 28. Killing frost has occurred as late as April 24 and as early in the fall as October 8. The average length of the growing season is 209 days.

"A broadly diversified system of agriculture is possible in this county. Farming operations can be carried on throughout the year except for short periods during the winter. While the distribution of rainfall is more or less uniform, crops occasionally suffer from short periods of drought. The ill effects can be lessened by fall plowing, by preparing a deep, mellow seed bed, and, in the case of clean cultivated crops, by frequent shallow cultivations to conserve the moisture.

"The following table, compiled from the records of the Weather Bureau station at Nashville, located in Davidson County, about forty miles north of the county seat of Maury County, at an altitude of 654 above sea level, gives the normal monthly, seasonal, and annual temperature and precipitation covering a period of fifty-three years. This figure represents with sufficient accuracy the conditions existing in Maury County.

Normal, Monthly, Seasonal, and Annual Temperature and Precipitation at Nashville, Davidson County (Elevation - 654 feet)

Month	Temperature			Precipitation			
	Mean	Absolute Maximum	Absolute Minimum	Mean	Total Amount for the driest year	Total Amount for the wettest year	Snow Average Depth
	Degrees Fah.	Degrees Fah.	Degrees Fah.	Inches	Inches	Inches	Inches
Dec.	41.0	75	- 2	3.82	1.65	3.32	1.5
Jan.	38.6	78	-10	4.85	2.76	3.72	2.8
Feb.	41.6	79	-13	4.32	4.58	12.37	3.0
Winter	40.4	79	-13	12.99	8.99	19.43	7.3
March	49.2	89	3	5.44	5.01	8.16	1.8
April	59.0	90	26	4.36	4.13	5.26	.1
May	68.2	96	36	3.50	3.30	4.13	T.0
Spring	58.8	96	3	13.30	12.44	17.55	1.9
June	75.6	100	42	4.37	2.98	3.95	.0
July	77.9	102	56	4.35	1.58	5.69	.0
Aug.	77.8	104	51	3.47	2.36	2.22	.0
Summer	77.1	104	42	12.19	6.92	11.86	.0
Sept.	71.8	99	32	3.68	.95	5.39	.0
Oct.	61.0	92	27	2.48	1.31	7.24	.T
Nov.	49.0	81	10	3.85	2.13	5.77	.2
Fall	60.6	99	10	10.01	4.39	18.40	.2
Year	59.3	104	-13	48.49	32.74	67.24	9.4

[4]

[4]Ibid

"The soils of Maury County are such as may be expected to form in a humid region with an annual rainfall of not less than forty-nine inches and a mean monthly temperature above freezing throughout the year. These climatic conditions of moderately heavy rainfall and alternate freezing and thawing during the freezing months have favored erosion and leaching. These forces working upon materials accumulating through the disintegration of various sedimentary rocks, ranging widely in their chemical constituents, have given the present varied soils.

"There are in Maury County eighteen soil types, whose characteristics have been determined by the inter-relation of rainfall and temperature, character of surface - flat or sloping, well-drained or poorly drained - character of vegetation, and nature of soil-making materials. These eighteen types have been grouped in nine series, the grouping being based upon similarities in all features except texture, the various textures being common to all series.

"In this region weathering has been thorough, and lime carbonates have been leached from both soil and subsoil to considerable depths.

"This is a region in which limestone constitutes, by far, the greater part of the underlying geological formations. The materials, therefore, from which the soils have been derived are more or less highly calcareous, yet none of the soils contain lime carbonate within the true soil section. The limestones range from nearly pure carbonates to highly siliceous and argillaceous in character. The details of rock character will be referred to in the soil descriptions.

"Relatively small areas of old and recent alluvium have supplied the materials from which certain soils have been developed.

"The table below gives the name, and the actual and relative extent of each of the various soils of Maury County:

AREAS OF DIFFERENT SOILS

Soil	Acres	%
Maury silt loam	96,320	24.4
Baxter gravelly loam	55,872	14.1
Rough stony land	40,128	10.1
Clarkesville gravelly loam	29,888	7.6
Hagerstown silt loam	29,888	7.6
Huntington silt loam	28,160	7.1
Elk silt loam	19,520	
Rolling phase	2,368	5.5
Lowell silt loam	17,664	4.5
Hagerstown gravelly loam	17,024	4.3
Lowell stony clay	13,184	3.3
Lowell gravelly loam	9,024	2.3
Hagerstown clay loam	6,336	1.6
Culleoka very fine sandy loam	6,272	1.6
Baxter silt loam	5,888	1.5
Lowell clay loam	5,760	1.4
Culleoka loam	4,928	1.2
Mine pit and mine dump	2,880	.7
Hagerstown stony loam	2,624	.7
Huntington gravelly loam	1,152	.3
Dickson silt loam	640	.2
Total	395,520	100.0

"The Maury silt loam is a dark grayish brown to brown, mellow silt loam, underlain abruptly at eight to sixteen inches by a dull-red, brownish-red, or yellowish-red silty clay or clay which is moderately friable when moist and slightly plastic when wet. The subsoil in many places contains granular brown material rich in phosphorus. The soil is deeper, as a rule, on the lower gentle slopes, as a result of the accumulation of colluvial material, and generally of deeper brown color. In places on the steeper slopes the surface soil is only a few inches thick, and there are included patches of clay loam and clay too small to show on the map (No. I). Occasionally the lower subsoil is reddish yellow or yellowish brown in color, this condition arising in low, imperfectly drained situations. Some included small patches of soil resemble closely the Lowell silt loam. Chert and limestone fragments are found in the soil in occasional patches, and here and there outcrops of limestone appear on slopes.

"The two large areas of this type between Columbia and Mountpleasant and south of Spring Hill are gently rolling to undulating, while the smaller areas in the eastern and southeastern parts of the county are more rolling, with eroded slopes, and include a greater number of patches of clay loam.

"The limestones from which the Maury and the Hagerstown silt loams are derived are phosphatic, and the soils are both relatively high in phosphorus. The areas mapped as Maury, however, coming from the rocks of the Hermitage and Bigby limestones, contain considerably more of this important element than those areas shown as Hagerstown, as the following chemical analyses show.

CHEMICAL ANALYSES OF MAURY AND HAGERSTOWN SILT LOAMS

	Maury Silt Loam[1]			Hagerstown Silt Loam[1]			Hagerstown Silt Loam			
	Sample No. 28,495 soil 0 to 15 inches	Sample No. 28,496 sub-surface 15 to 24 inches	Sample No. 28,497 subsoil 24 to 30 inches	Sample No. 28,503 soil 0 to 15 inches[4]	Sample No. 28,504 subsoil 15 to 30 inches	Sample No. 28,505 lower subsoil 30 to 42 inches	Soil 0 to 4½ inches	Sub-surface 4½ to 11 inches	Subsoil 11 to 24 inches	Lower subsoil 24 to 36 inches
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
SiO_2	74.19	76.77	76.27	78.58	76.68	73.94	73.11	75.98	71.67	67.10
TiO_2	1.18	1.19	1.25	1.35	1.09	2.37	1.05	1.08	1.10	1.17
Fe_2O_3	3.79	3.74	4.14	3.73	3.93	6.27	6.12	5.82	7.90	8.64
Al_2O_3	8.88	8.84	9.51	8.70	11.06	8.98	8.30	9.18	12.16	14.10
MnO	.28	.34	.23	.26	.16	.20	.44	.37	.37	.34
CaO	1.09	.54	2.04	.78	.65	.79	.37	.25	.23	.13
MgO	.41	.48	.51	.36	.59	.59	.45	.48	.49	.58
K_2O	1.56	1.40	1.63	1.43	1.55	1.54	.91	.93	.83	.80
Na_2O	.43	.37	.37	.53	.43	.35	.20	.12	.04	.04
P_2O_5	.94	.85	.77	.48	.55	.85	.10	.11	.11	.15
SO_3	.16	.10	.07	.14	.12	.07	.07	Trace	.06	.07
N	.19	.14	.08	.14	.08	.07	----------			
Ignition Loss	66.45	4.98	3.93	4.51	3.66	3.76	----------			
Moisture	2.95	2.83	3.01	2.98	3.69	2.86	----------			

[1]Samples from Maury County, Tennessee

[2]Samples from Murfreesboro, Rutherford County, Tennessee

[3]Sample taken 7 miles south of Columbia

[4]Sample taken 3½ miles northeast of Mountpleasant

"This difference is the basis for creating the Maury series. It is a significant difference reflected in the productiveness of the soils.

"The Maury silt loam is everywhere a productive soil, although some areas are being washed and badly gullied. The problem of preventing erosion when the surface is rolling is very serious; it is not a matter of conservation of soil fertility, but that of conserving the soil itself. The loss can be prevented and much of the badly washed land reclaimed by carefully laying out terraces and by using washed areas, at least for some years, as bluegrass or clover pasture.

"The Maury silt loam is one of the richest upland soils of the South. It is the predominant soil over the more phosphatic limestones of the Central Basin region, and the most important and best developed soil in Maury County. Practically all of it is improved land and much of it is in cultivation. The native tree growth is found only in small groves and woodlots. It consists mainly of poplar, with some beech, oak, and other hardwoods. The type is locally called 'poplar land'.

"The principal crops grown on this soil are corn, wheat, and clover. The largest sources of farm income are beef cattle and hogs. Minor crops grown are oats, rye, barley, potatoes, and sorgo. Corn yields from 25 to 60 bushels, wheat from 15 to 30 bushels, and clover from 1 to 2 tons per acre. Land values vary from $50 to $200 an acre, depending on the improvements and the nearness to markets and lines of communication.

"The following table gives the results of mechanical analyses of samples of the soil and subsoil of the Maury silt loam:

Mechanical Analyses of Maury Silt Loam

Number	Description	Fine Gravel	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay
401718	Soil	1.2%	2.6%	0.8%	3.3%	12.0%	62.4%	17.4%
401719	Subsoil	1.9	2.2	0.8	2.4	7.6	51.1	34.0

Hagerstown Stony Loam

"The type mapped as the Hagerstown stony loam really represents areas of Hagerstown silt loam containing a large amount of rock outcrop. The soil is derived mainly from the massive Carter's limestone, which tends to weather very irregularly. It has weathered more rapidly along the joint planes and has left large bowlders and ledges of rock and outcrop with interspersed patches of deep soil of the typical Hagerstown silt loam. This type covers but a small area. It is used for pasture and wood lots, and is not well suited for any other use.

Hagerstown Gravelly Loam

"The Hagerstown gravelly loam consists of 8 to 12 inches of brown gravelly loam or silt loam, underlain by a dull-red to reddish-yellow clay or gravelly clay. Fragments of chert, and in places shaly limestone, from the adjacent higher slopes or from the formations formerly overlying the region are numerous on the surface and to some extent throughout the subsoil. The type occurs on the lower slopes of the hills, especially in the south-central part of the county, in association with the higher gravelly formations. The topography is moderately to steeply sloping. Some washing of the soil occasionally occurs, but the gravel in the surface material retards the run-off and minimizes the damage from erosion.

"Most of this type is in cultivation, corn being the principle crop. Wheat, oats, rye, and clover are grown as minor crops. Most of the orchards in the county are located on this type, and where the trees are cared for they produce good fruit and give a profitable return. Apples, especially those of the fall and early winter varieties, do well. Spraying and pruning, however, are necessary to insure the best results.

Hagerstown Silt Loam

"In visible characteristics the Hagerstown silt loam cannot be dis-

tinguished from the Maury, and the reader may turn to the description of the latter soil for information on the color and arrangement of the several layers making up the profile. The two types, as already stated, have been separated on the basis of a chemical difference[a], this being one of the comparatively few instances where this has been found necessary. The name 'Hagerstown silt loam' has been given to those areas in Maury County in which the phosphorus content is relatively low. The proportion of this constituent is nevertheless, larger than typical of the Hagerstown, for the limestones of this region are phosphatic. As compared with the Hagerstown of other sections, all this soil in Maury County might have been thrown with the Maury silt loam. The reader is referred to the table on page 10 giving the results of chemical analyses of the Maury silt loam, the Hagerstown silt loam from phosphatic limestone, and the Hagerstown silt loam from nonphosphatic limestone.

"Important areas of the Hagerstown silt loam lie south and east of Spring Hill in the northeastern part, and southeast, west, and southwest of Columbia in the central, western, and southwestern parts of the county.

"Erosion is a problem on this soil. The slopes should be carefully terraced and the steeper areas kept in pasture as much of the time as practicable. It is possible to reclaim many of the fields where erosion has not reached an advanced stage. This soil is too valuable to be allowed to suffer irreparable damage.

"While the Hagerstown silt loam is not as productive as the Maury silt loam, well-farmed areas give good yields of corn, wheat, and clover. In adaptation and present use it is similar to the latter soil. Hogs and

[a]Mapping on the basis of a chemical character is a very different matter from mapping on visible characters, and the separation made in the present survey must be considered only approximate. A vast amount of analytical work will be required to fix definitely the boundaries between the Maury and Hagerstown types.

cattle are among the more important products of the farms on this type.

Hagerstown Clay Loam

"The Hagerstown clay loam is a reddish-brown clay loam, underlain at 3 to 6 inches by a dull-red or yellowish-red silty clay or clay.

"The type in the vicinity of Columbia represents a very shallow variation of Hagerstown silt loam, the silty covering of which has been partly washed away. In the eastern part of the county the clay loam is more typically developed; here it occurs closely associated with the glade areas of Rough stony land.

"The Hagerstown clay loam is everywhere deficient in organic matter. In most places it contains many outcrops of limestone, and it is nowhere as productive as the Hagerstown silt loam. Corn, wheat, and oats, however, give fair yields under favorable conditions. A rotation of crops in which a clover or bluegrass pasture occupies half the time would aid in restoring the necessary organic matter and prevent the erosion which comes with continuous one-crop cultivation.

"The following table gives the results of mechanical analyses of samples of the soil and subsoil of the Hagerstown clay loam:

Mechanical Analyses of Hagerstown Clay Loam

Number	Description	Fine Gravel	Coarse sand	Medium Sand	Fine Sand	Very fine Sand	Silt	Clay
401720	Soil	1.6%	2.9%	0.9%	8.8%	14.1%	51.5%	20.2%
401721	Subsoil	1.2	2.7	0.8	5.6	13.6	41.6	34.4

Lowell Stony Clay

"The surface soil of the Lowell stony clay is a yellowish-brown to dark-brown clay, underlain at shallow depths either by yellow to greenish-yellow, sticky plastic clay or by brownish clay which passes

beneath into sticky plastic clay. Bed rock is usually reached at shallow depths and always within the 3-foot profile. Outcrops and fragments of shaly limestone occur in many places.

"This type occupies slopes, ridges, and knolls, and is developed in small areas throughout the Central Basin section of the County. Cedar is a characteristic tree, and hackberry, black locust, and honey locust are more or less plentiful. Prickly pear is a common plant.

"Bluegrass does fairly well on this soil. Most of the land is used for pasture, in connection with the growing of locust posts for fence posts and other timber as a source of wood.

Lowell Gravelly Loam

"The surface of the Lowell gravelly loam is a grayish-brown to brown silt loam to silty clay loam 4 or 5 inches deep. The subsoil is a yellowish-brown, or mottled brown and yellow, tough, plastic clay. The surface soil of most of the type is a silty clay loam in texture, and the soil would be mapped as such if it were not for the amount of gravel present. The surface is usually strewn with chert fragments and gravel, and similar coarse material also appears throughout the soil profile. Included in the areas mapped as Lowell gravelly loam are small patches of Lowell clay loam and stony clay.

"Rock outcrops are present on the slopes, but not in sufficient quantities to affect cultivation. The topography is rolling to hilly, some of the slopes being quite precipitous.

"Fair yields of clover are produced on this soil. The other crops of the region are grown to some extent. The type is more apt to wash than the Hagerstown gravelly loam or the Clarksville gravelly loam. Many fields now in cultivation should be changed to permanent pasture or set

with locust or some other valuable tree to prevent further erosion.

Lowell Silt Loam

"The Lowell silt loam is a grayish-brown to brown, mellow silt loam, underlain at 6 to 10 inches by a yellow to yellowish-brown silty clay, which passes quickly into a pale-yellow, tough, plastic clay. Brown and dark-colored concretionary material and yellowish or dark-brown concretions are generally present to some extent, especially in the lower subsoil and substratum. In places, particularly on the lower, imperfectly drained slopes, such concretionary material forms a hardpan subsoil. In these areas gray mottling is quite noticeable. In places the upper subsoil of the type is reddish-yellow or reddish, resembling the upper subsoil of the Hagerstown silt loam, but this passes beneath, within the 3-ft. section into either yellow or mottled yellow and reddish heavy, plastic clay.

"The surface of this soil is undulating to gently rolling, and occasionally hilly. Surface drainage over this type as a whole is very well established, although there are local areas that are poorly drained.

"This type is developed throughout the Central Basin part of the county. The area in Carters Creek valley is gently undulating and well suited to the use of improved labor-saving machinery.

"This is a good agricultural soil, and practically all of it is in cultivation. Corn, wheat, and clover are the principal crops. Corn ordinarily yields 25 to 60 bushels per acre, wheat 10 to 30 bushels, and clover 1 to 2 tons.

"Land values on this soil usually range from $50 to $100 an acre, according to the location and improvements.

Lowell Clay Loam

"The surface soil of the Lowell clay loam to a depth of 6 or 8 inches is a yellowish-brown to light grayish brown silty clay loam to clay loam. This is underlain to a depth of 3 feet or more by a yellowish-brown, stiff, plastic clay. The surface soil contains small quantities of cherty rock fragments, and the areas are broken here and there by limestone outcrops. The topography generally is rolling to hilly, but in some places the type occupies valley positions and the surface flattens out to gently rolling or undulating. Parts of the areas consist of eroded Lowell silt loam, but in most places the type has apparently been derived from the lower, shaly limestone of the area.

"While not an extensive soil, it is quite productive and with proper management gives yields comparing favorably with those obtained on the silt loam of the series. It is used for the same crops as the silt loam.

Culleoka Very Fine Sandy Loam

"The soil of the Culleoka very fine sandy loam is a brown very fine sandy loam, ranging to a fine sandy loam. This is underlain at 6 to 8 inches by a yellowish very fine sandy loam or loam which passes usually at 10 to 14 inches into a reddish-yellow or dull-red, moderately friable clay or sandy clay. In places the lower subsoil is a stiff, plastic clay, some areas representing an inclusion of Tilsit soil, a type found elsewhere in the State but not in large enought areas in Maury County to warrant mapping. On the other hand, in some places the lower subsoil consists either of decomposed residual 'sandstone', or the unweathered sandy limestone appears within 3 feet of the surface.

"Occasionally rusty-brown concretionary material and some yellowish mottlings are noticed in the lower subsoil. Granular, siliceous limestone underlies most of the soil, with limestone occurring on the lower

slopes, and residual 'sandstone' fragments are plentiful on the surface throughout the areas of this type. The topography ranges from rolling to hilly or ridgy. As mapped the type includes small patches of soil having a texture of silt loam or loam. Drainage is usually good, but erosion is not so destructive as on some of the other limestone valley soils.

"The Culleoka very fine sandy loam occurs somewhat extensively in the eastern and southeastern parts of the county. The type is of considerable value, the greater part of it being under cultivation. It is not as strong a soil as the Maury or Hagerstown silt loams, but good yields of corn, cotton, clover, and cowpeas are obtained. A short rotation maintains the productiveness. Corn in ordinary season yields 18 to 30 bushels per acre, wheat 12 to 18 bushels, clover 1 to 2 tons, and cotton $\frac{1}{4}$ to $\frac{1}{2}$ bale.

"This type is especially adapted to the production of truck and fruit crops.

"The following table gives the results of mechanical analyses of samples of the soil and subsoil of the Culleoka very fine sandy loam:

Mechanical Analyses of Culleoka Very Fine Sandy Loam

Number	Description	Fine Gravel	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay
401731	Soil	0.2%	0.7%	0.4%	29.0%	24.5%	31.8%	13.4%
401732	Subsoil	0.5	1.4	0.7	21.5	26.4	25.2	24.3

Culleoka Loam

"The Culleoka loam is a grayish-brown to brown mellow loam, underlain at 6 to 10 inches by a grayish-brown, yellowish-brown, or dull-red, friable clay loam or heavy loam. In some places the subsoil is a dull-red, friable sandy clay containing splotches of gray and brown mottlings.

Fragments of residual 'sandstone' are present on the surface, and outcroppings of sandy limestone occur on the crests and lower slopes and in some places supplies a part of the material from which the soil is derived.

"This type in general occupies gently rolling to moderately rolling country. Some of the areas, however, are nearly flat. The type is developed in the eastern part of the county.

"This is considered a good soil. Corn, cotton, oats, wheat, sorgo, and the legumes are grown, the yields comparing favorable with those obtained on the Hagerstown silt loam.

"The following table gives the results of mechanical analyses of samples of the soil and subsoil of the Culleoka loam:

Mechanical Analyses of Culleoka Loam

Number	Description	Fine Gravel	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay
401729	Soil	0.5%	1.4%	0.6%	12.2%	25.0%	47.0%	13.2%
401730	Subsoil	0.4	1.0	0.4	10.9	22.0	45.1	19.9

Dickson Silt Loam

"The Dickson silt loam, to a depth of 6 to 10 inches, is a grayish yellow to pale-yellow silt loam which dries out to a gray color. This layer is underlain to a depth of 16 to 24 inches by a yellowish silty clay which passes below into a compact, yellow or pale-yellow silty clay, mottled with gray. In many places there is very little mottling; in others the proportion of mottling is greater and the material is less compact. Reddish-brown concretions and partially decomposed chert fragments are found in the lower subsoil of many areas. In a number of places a tough clay, mottled yellow and gray, is reached at a depth of about 36 inches. Clay of this description is exposed in a road cut in the south-

western corner of the county, about 2 miles northeast of Crestview, situated on the Mountpleasant Pike just over the line in Lawrence County. In the forested areas the surface inch or two is gray or brownish gray.

"Oak and hickory of rather small size are the principal trees on this soil. The type occupies flat and undulating areas in the Highland Rim section of the county. The drainage is not sufficient in the level or flat areas.

"There has been very little agricultural development on this type in Maury County. In other counties of the Highland Rim of middle Tennessee this type has been farmed successfully to general crops, such as corn, wheat, and oats, and in Robertson, Sumner, and Montgomery Counties it has been found to produce excellent Burley tobacco.

Baxter Gravelly Loam

"The Baxter gravelly loam consists of 2 to 6 inches of gray to brownish-gray silt loam, underlain by 10 to 14 inches of yellow to pale-yellow silt loam or silty clay loam, which grades into a light-red, friable clay extending to a depth of 3 feet or more. The surface is covered in places with chert gravel, which varies from the size of a pea to fragments 6 inches in diameter. Gravel is also found throughout the soil profile.

"This type occupies the upper part of the slopes and covers many of the lower lying ridges in the Highland Rim section of the county. The topography varies from gently rolling to hilly. Some of the slopes are quite precipitous.

"Corn does well on this type. Yields of 12 to 35 bushels per acre have been obtained by farmers using careful methods. The gravel in the surface soil and subsoil hinders cultivation, but on the surface it acts as a mulch, retarding erosion during excessive rains and preventing rapid

loss of moisture from the cultivated soil. There are many slopes, however, in cultivation that should be reforested or changed to permanent pasture.

Baxter Silt Loam

"The surface soil of the Baxter silt loam is a light-brown to brownish-gray silt loam, 6 to 10 inches deep. This is underlain by a grayish-yellow to pale-yellow silt loam to silty clay loam which extends to a depth of 15 to 20 inches, changing gradually at this depth to a dull-red or brick-red color and to a friable silty clay or clay texture. In most places the subsoil contains varying quantities of chert fragments. Included in the type as mapped are small patches of Baxter gravelly loam. These really represent eroded spots of the typical silt loam.

"The topography of the Baxter silt loam varies from flat to gently undulating. It occupies the high, tablelike crests of ridges and stream divides in the Highland Rim region. It is more extensively developed in the northwestern part, but there are large areas along the Giles and Lawrence County lines in the southwestern part. The type originally supported a heavy growth of chestnut, black oak, pin oak, hickory, and poplar.

"When brought under cultivation this type continues quite productive for two or three years. After this, or when the small original content of organic matter has become depleted, the yields decline markedly unless steps are taken to maintain the soil in good condition. Large applications of barnyard manure and lime or ground limestone are two important means of doing this.

Clarksville Gravelly Loam

"The Clarksville gravelly loam is a grayish-brown to brown, mellow silt loam, underlain at 4 to 10 inches by a yellowish silty clay loam to silty clay, and in many areas grades into a moderately stiff, yellowish-

brown clay. The surface is usually covered with chert or flint gravel shaly limestone, and platy chips of the dark bituminous shale of the Chattanooga formation. There is also an abundance of yellowish, somewhat porous, and softer chert coming from later formations, this material occurs on the surface and in the subsoil to a depth of 3 feet or more. The soil represents a mixture of material from the shales, and also colluvial accumulation from adjacent higher soils.

"There is a wide variation in the texture of the subsoil of this type. In places it is grayish to white, plastic clay; in others the subsoil approaches that of the Hagerstown gravelly loam, being a brown, friable, silty clay. On the lower, gentler slopes it is usually deeper, in places rarely appearing within 2 feet of the surface, while on the steeper, higher slopes it lies very near the surface.

"The chert material of much of this type is probably the residuum from the formations formerly overlying the region, the St. Louis limestone in particular, which weathers into fine silty material and hard cherty fragments. This chert material retards run-off and aids the soil in absorbing moisture.

"The Clarksville gravelly loam occupies the lower slopes in the Highland Rim country. It is associated with the Baxter gravelly loam and with small areas of rough stony land, which represents the outcropping formations dividing the Baxter from the Clarksville series.

"The topography is rolling to steeply sloping. The type frequently contains outcrops of limestone and shale. About 20% of it is under cultivation at the present time, the rest being forested, mainly by the hardwoods , birch, oak, and hickory. The soil compares favorably in productiveness with the Hagerstown gravelly loam. Corn, oats, rye, and clover are the principle crops, corn being by far the most important. Corn ordin-

arily yields 25 to 50 bushels per acre, oats 20 to 45 bushels, rye 10 to 15 bushels, and clover 1 to 2 tons.

"Land values on this type range between $35 and $80 an acre.

Elk Silt Loam

"The Elk silt loam consists of 6 or 8 inches of brown silt loam or heavy silt loam, underlain by light-brown to brownish-yellow, heavy silt loam to silty clay loam. The surface soil and subsoil contain small quantities of subangular gravel.

"This type occupies flat to slightly hummocky second bottoms or terraces along Fountain Creek and other streams. It is not subject to overflow. Its entire area is under cultivation. The soil is well suited to the general farm crops, and is also used in this county for growing cantaloupes. In yields it compares favorably with the better upland soils.

"A number of gravelly areas are included with the Elk silt loam, and are shown on the map with gravel symbols. These consist of brown silt loam, with accumulations of rounded quartz gravel and subangular chert scattered on the surface and embedded in the soil to a depth of 3 feet of more. This soil is not so desirable as the typical Elk silt loam. It is likely to be droughty. It occurs in narrow strips along the eroding streamlets and is of small extent.

"The Elk silt loam is a productive soil, used principally in growing wheat, oats, corn, rye, and clover. Yields compare favorably with those obtained on the silt loams of the Maury and Hagerstown series. Most of the more rolling land is used for pasture.

"Elk silt loam, rolling phase. -- The Elk silt loam, rolling phase, is a brown, mellow silt loam, 6 to 12 inches deep, underlain by a reddish-brown or reddish-yellow silty clay loam, passing at 20 to 24 inches into a friable, reddish-yellow to dull-red silty clay. On the upper slopes

part of the surface soil has been removed by erosion, and the reddish-brown silty clay of the upper subsoil exposed. There is usually present in the lower subsoil an abundance of rounded and subangular chert gravel.

"The topography varies from gently undulating on the tops of the old terraces to somewhat rolling on the areas approaching the present stream channels, and decidedly rolling and sloping on the terrace fronts. The soil represents well-oxidized old alluvial deposits. On the slopes, where there has been considerable erosion, outcrops of limestone and patches of residual soil appear. In such positions the subsoil may contain more or less material residual from limestone.

Huntington Gravelly Loam

"The surface soil of the Huntington gravelly loam is a grayish-brown loam to silt loam, 6 to 10 inches deep. It is underlain by a light grayish-brown or brown silt loam or silty clay loam. The surface is usually covered with gravel and chert fragments, washed from the adjoining Clarksville and Baxter soils, and gravel is present in large quantities throughout the 3 foot profile.

"The type represents a mixture of colluvial and alluvial material. It occurs along the smaller streams and the headwater tributaries of the larger streams. Practically all of it is in cultivation. It is well suited to corn, oats, and grass; in the southeastern part of the county satisfactory yields of cotton are obtained.

Huntington Silt Loam

"The surface soil of the Huntington silt loam is a brown to light grayish-brown mellow silt loam, 6 to 12 inches deep. Below this layer there appears a light-grayish to yellowish-brown silt loam, which extends to a depth of 3 feet or more.

"This soil occupies first bottoms along the larger streams of the county. It is flat to gently sloping and is subject to occasional overflow. Drainage over the greater part of the type is adequate. This soil is highly productive. Corn, oats, sorge, and other forage crops are grown, and yields average higher than on the other soils of the county.

Mine Pit and Mine Dump

"The type mapped as mine pit and mine dump includes areas of Maury or Hagerstown soils (originally mainly the Maury silt loam) that have had the overburden of soil removed in the process of mining phosphate rock. This material is red or yellowish-red clay, mixed with small quantities of shaly phosphate rock. Owing to the uneven surface of the mined areas and the expense of leveling them so that they can be cultivated, much of this soil may remain in its present state for a long time. An area 1½ miles east of Mountpleasant, on the site of an old phosphate mine, has been leveled and the soil put back into cultivation, producing good crops.

Rough Stony Land

"The type mapped as rough stony land comprises steep slopes with many ledges of outcropping limestone, shaly limestone, and sandstone. It occurs on the steep slopes of the Highland Rim and along the stream courses. There is a thin mantle of soil, in places sufficient to support a forest growth and, in a small way, some pasture grasses. The land is too steep, however, for cultivation and should be left in woods and used for pasture.

"This type includes, in the basin country, a number of not very steep areas where outcrops of limestone cover a considerable part of the surface and the soil is for the most part very thin, being underlain at a

depth of a few inches by the bed rock. Cedar is the characteristic growth in these places. The trees in many places are scattered, giving use to the name 'glade' or 'glady' land.

"Rough stony land is used for pasture, but a water supply must be provided, as there are no surface streams in these areas."[5]

MINERALS

Phosphate

Brief Historical Statement

"In the early days of the phosphate industry in the United States, South Carolina supplied most of the phosphate used. Later Florida came into prominence, and in 1894 assumed first place in the point of production. In this same year Tennessee became a factor in the market.

"The chance discovery of phosphate in Tennessee in the year 1893, resulted through the finding of a thin seam of asphalt, which occurs in very minor quantities in the shale above the blue phosphate rock. Mr. George W. Harder, who still resides near the original point of discovery, was attracted by this black, shiny asphalt, which he found in the bed of Swan Creek, near the Hickman and Lewis County line. He sent some of it, with a piece of the county rock attached, to a chemist in Nashville for analysis. The latter recognized the asphalt as of no value, but making an analysis of the attached rock, discovered it to contain phosphoric acid. Thus, inadvertently, the phosphate deposits first became known, and immediately further search led to discovery and development of the blue rock along Swan Creek.

The brown rock, though naturally more exposed than the blue bedded

[5]Soil Survey of Maury County, Tennessee, U. S. Department of Agriculture, Bureau of Soils in co-operation with Tennessee Geological Survey

rock, was not known until the subsequent discovery, in October, 1895, of the Mountpleasant rock, by Judge S. Q. Weatherly, now of Carters Creek, Tennessee.

"Not only did these deposits contain a rock richer in its phosphatic content than the Swan Creek material, but it was also more accessible and hence, less costly to mine. A new impetus was thereby given to the industry, which caused Tennessee to advance from a poor third in production, to second, surpassing the output of South Carolina, and being exceeded only by Florida.

"Recognition of the Mountpleasant type of phosphate rock led to its discovery at other places, and the development of these deposits drove the Swan Creek blue rock temporarily from the market."[6]

Statistics showing production of phosphate in Tennessee:

1894 - 19188; 1895 - 38,515; 1896 - 26,157; 1897 - 128,723;
1898 - 308,107; 1899 - 424,109; 1900 - 454,491; 1901 - 409,653;
1902 - 390,799; 1903 - 460,530; 1904 - 530,571; 1905 - 482,859;
1906 - 547,677; 1907 - 638,612; 1908 - 455,431; 1909 - 333,003;
1910 - 398,188; 1911 - 437,370; 1912 - 423,331; 1920 - 635,000;
1924 - 318,642; 1925 - 442,201.

Table of Phosphate Bearing Rocks in Tennessee

"Name of Formation	Thickness	Description
Silurian Devonian		
Chattanooga Shale	0-10 ft.	A hard, black shale, weathering into small angular fragments at the surface, generally with a phosphatic layer at its base, which locally is of economic importance. Also a

[6]The Resources of Tennessee, vol. IV, no. 2; Pub. by State Geological Survey

		green shale sometimes occurs at its base. Exposure usually steepened.
Clifton Limestone	0-60 ft.	An even bedded, dense, light gray, or bluish limestone, often thin bedded, and occasionally shaly in the lower portions.
Ordovician		
Fernvale Formation	0-40 ft.	Soft green and chocolate colored shales, and red ferruginous, crystalline limestones, occasionally phosphatic.
Leipers Formation	0-100 ft.	Nearly uniform crystalline limestone, the more granular portions being highly phosphatic. This formation is locally of economic importance.
Catheys Formation	0-100 ft.	Shales and knotty limestones, usually underlain by thick bedded, almost crystalline limestone, and overlain by fine grained, blue and earthy limestones, separated by thin seams of shale. The basal part sometimes contains granular phosphatic layers.
Bigby Limestone	30-100 ft.	Generally a nearly uniform, granular, crystalline limestone, the upper parts are often shaly or sandy, the lower parts having beds of shale, but never sandy. This formation is one of the most important phosphatic horizons in Tennessee.

Hermitage Formation	40-70 ft.	Even bedded, alternating layers of clayey and siliceous limestones and shale in the lower third; siliceous limestones in the upper and middle parts. Sometimes slightly phosphatic, but of no economic value as a source of phosphate.

Types of Phosphate Rocks

"There are three distinct varieties of phosphate rock in Tennessee, known commercially as: (a) the 'brown rock'; (b) the 'blue rock'; and (c) the 'white rock'. Of these, only the first two are being exploited at the present time, and are here given attention.

"Chemically, phosphate rock may be considered, aside from impurities, as the normal tri-calcium phosphate of lime, the 'phosphorite' of some authors, with the chemical formula $Ca_3(PO_4)_2$, though it is not probable that it should be considered as having constancy of composition, and therefore should not be classed as a mineral. Such impurities as iron oxide, clay, calcium carbonate, etc., are usually commingled with it in the natural deposits. These are undesirable, and are eliminated as much as possible in preparing the rock for market.

Mountpleasant District (Brown Rock)

In treating the distribution by fields, it must be borne in mind that they represent somewhat artificial divisions which, in many cases, connect with one another directly, without complete interruption. The Mountpleasant and Southport fields practically unite, as there is no absolute cessation of deposits in the territory lying between their centers. Likewise, in going southeastward from Southport, small occurrences act as a connecting link between that place and the Giles County deposits, on

the Pigeon Roost and Richland Creeks.

"The Mountpleasant field is perhaps, the most striking example of the formation of the blanket type of deposits. In the southwestern part of the field, some rim and transitional types occur, as the hills toward Southport are approached. Finally, in continuing to Southport, the rim deposits entirely displace the blanket type.

"This field was the first one known of the brown rock type, and has been continuously worked since its discovery in 1895. The general area underlain by phosphate is elliptical in shape, with the long axis of the ellipe about four miles in length, trending northeasterly. The field is some two miles in width. Mountpleasant lies in its northwestern portion. The area is well drained by Big Bigby, Sugar, and Quality Creeks."[7]

Other districts are: The Scott's Mill district; the Southport district; the Century district whose deposits are probably second to the Mountpleasant field; the Brickchurch-Diana field; and the Centerville and Swan Creek district.

Distribution of the Blue Rock

"The high grade blue rock lies mainly in Hickman, Lewis, and Maury Counties. It is being mined at two localities only - Gordonsburg, on Swan Creek, in Lewis County, and at Leatherwood in Maury County. Blue rock has been reported from Forty-eight Creek in Wayne County and on Jerry Branche, and Morgan's Creek, in Hickman County. These latter two localities are east of Centerville and north of Duck River. There is apparently much good rock along Catheys Creek and the Baptist and Love branches."[8]

[7]Ibid
[8]Ibid

Iron Ore

Iron ore is found in the western Highland Rim covering an area 50 miles wide or 5400 square miles. This lies in the Counties of Lawrence, Wayne, Hardin, Maury, Lewis, Hickman, Humphreys, Dickson, Houston, Montgomery, and Stewart east of the Tennessee River, and Benton and Decatur Counties west of the river. The ores in this belt are limonite with some hematite and turgite, and occur associated with chert and clay from the decomposition of the lower Mississippian limestones. These deposits in places have a thickness of, up to, over 100 feet. The ore makes up from one half to one fourth or less of the mass. In Maury County, the greatest deposits are found at Nixon's ore banks near Hampshire. The ores in this entire territory have never been sufficiently prospected.

Chert

The chert deposits of Tennessee are very widespread and of practically unlimited extent. They are used primarily as road material, but during the recent war, a deposit was mined near Iron City and used as flint linings for tube mills. Mines were also located near St. Joseph. This flint was shaped at the mines into blocks 5" thick, 6 to 14" long and 5 to 8" wide and shipped to the shamp mills of the different mining companies in America and was used by them as a lining for their tube mills. Mines have been opened from time to time in Maury County for the purpose of securing road materials, and many of the roads of the county are built of this material.

Limestone

Limestone in abundant quantities occurs throughout the entire county. The Carter's Creek limestone is best suited for the manufacture of lime and chemical lime.

Chattanooga Bituminous Shale

Large quantities of black shale capable of bearing 19 to 20 gallons of oil per ton are found in Maury County, but the greatest deposits are found at Leatherwood in Hickman County. This overlies the phosphate and must be removed in claiming the phosphate.

Marble

"Practically all of the counties of Middle Tennessee or west of the Cumberland Mountains, that is Franklin, Maury, Coffee, etc., have more or less marble of various kinds, all of which take a very high polish, although none of these marbles have been quarried for commercial purposes."[9]

Other Minerals

Traces of gold, manganese, amorphous silica, tripoli, lead, copper, and zinc are to be found in the County, but no investigations as to their possibilities have been made. There are also several sulphur springs and wells which bear H_2S.

Water Ways

There are no waterways in Maury County which afford transportation facilities on a commercial scale. However, "water power is developed in a small way on Fountain Creek, Duck River, Rutherford Creek, and Carter's Creek. The power developed at Columbia, on Duck River, produces electricity ..... for lighting and commercial purposes."[10] Duck River offers the greatest possibilities of any of these streams for water power development.

[9] Thirty-first Annual Report of the Mineral Resources of Tennessee, Department of Labor, Division of Mines

[10] Soil Survey of Maury County, Tennessee, U. S. Department of Agriculture, Bureau of Soils in co-operation with Tennessee Geological Survey

Gaging Station, Duck River at Columbia, Tennessee

"Location - At highway bridge two blocks north of public square at Columbia, three-fourths of a mile below dam and power plant of Mt. Pleasant Electric Co.

"Drainage Area - 1,210 square miles (measured on map compiled by United States Geological Survey; scale 1 : 500,000).

"Records Available* - February 9, 1901, to December 31, 1908; November 23, 1918, to September 30, 1924; discharge measurements only, previous to October 21, 1904, and from November 23, 1918, to April 27, 1920.

Intermittent gage-height record by United States Weather Bureau since 1886.

"Gage - Chain gage bolted to downstream railing of bridge, installed April 1, 1922, to replace Mott tape gage in use since April 27, 1920; read by F. J. Beard. Original Weather Bureau gage was vertical staff fastened to downstream end of pier near right bank; used from October 21, 1904, to June 16, 1905. From June 17, 1905, to December 31, 1908, a chain gage, in same location as present gage, was used. Datum of gages has remained unchanged.

"Discharge Measurements - Made from downstream side of bridge, or by wading; several measurements in earlier years were made from a boat.

"Channel and Control - Channel curved for 1,000 feet above and straight for 2,000 feet below station. One channel at all stages. Right bank subject to overflow at stage of 32 feet; left bank not subject to overflow. Bed of stream composed of solid rock and gravel; smooth and uniform. Control for low water is rocky shoal 1,000 feet downstream; practically permanent; highwater control not

*Discharge records published in Water-Supply Papers of U. S. Geol. Survey have been revised for this report.

determined.

"Extremes of Discharge - Maximum stage recorded, 32.05 feet at 7 a. m. March 3, 1922 (discharge, 27,800 second-feet); minimum stage, -0.03 foot at 9 a. m. Octover 22, 1922 (no flow, due to pondage at power plant three-fourths of a mile above gage).

A stage of 45.6 feet on March 30, 1902 was reported by the United States Weather Bureau.

"Regulation - Operation of power plant causes considerable diurnal fluctuation during low water; at times the flow is almost completely cut off, due to ponding water at dam.

"Accuracy - Stage-discharge relation not permanent; several rating curves used. Gage read to tenths twice daily during 1904-1908 and to hundredths twice daily during 1920-24. Records good above, and fair to poor below 300 second-feet.

Monthly discharge of Duck River at Columbia, Tennessee., for the years ending September 30, 1905-09: 1920-24

(Drainage area, 1,210 square miles.)

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1904-05					
October 21-31	165	85	133	.110	.04
November	258	85	136	.112	.12
December	14,000	104	1,710	1.41	1.63
January	11,800	360	2,000	1.65	1.90
February	14,700	144	4,220	3.49	3.63
March	17,800	755	3,080	2.55	2.94
April	1,400	308	642	.531	.59
May	25,600	472	3,510	2.90	3.34
June	9,460	280	1,960	1.62	1.81
July	8,380	170	1,220	1.01	1.16
August	2,980	100	655	.541	.62
September	3,340	100	385	.318	.35
1905-06					
October	3,340	80	1,050	.868	1.00
November	685	145	307	.254	.28
December	9,460	510	3,050	2.52	2.90
January	23,000	1,480	4,430	3.66	4.22
February	1,560	408	679	.561	.58
March	19,500	580	3,600	2.98	3.44
April	7,660	475	1,800	1.49	1.66
May	1,730	145	542	.448	.52
June	1,080	100	360	.298	.33
July	8,560	122	1,400	1.16	1.34
August	1,730	250	734	.607	.70
September	18,000	145	2,040	1.69	1.89
The year	23,000	80	1,680	1.39	18.86
1906-07					
October	11,700	342	3,150	2.60	3.00
November	11,200	222	1,790	1,48	1.65
December	15,300	440	2.640	2.18	2.51
January	15,400	790	2,790	2.31	2.66
February	14,900	510	2,730	2.26	2.35
March	16,600	650	4,960	4.10	4.73
April	1,240	440	660	.545	.61
May	10,200	475	2.550	2.11	2.43
June	5,410	342	1,350	1.12	1.25
July	7,300	310	1,150	.950	1.10
August	510	170	295	.244	.28
September	5,930	145	669	.553	.62

The year	16,600	145	1,740	1.171	23.19
1907-08					
October	342	100	197	.163	.19
November	4,600	222	1,180	.975	1.09
December	9,460	375	1,820	1.50	1.73
January	10,800	790	3,220	2.66	3.07
February	14,100	1,640	5,110	4.22	4.55
March	9,820	1,560	3,440	2.84	3.27
April	7,120	650-	1,660	1.37	1.53
May	6,760	685	1,840	1.52	1.75
June	1.990	310	854	.706	.79
July	1,080	195	375	.310	.36
August	2,710	195	508	.420	.48
September	5,140	195	854	.706	.79
The year	14,100	100	1,740	1.44	19.60
1908					
October	342	100	189	.156	.18
November	1,400	145	282	.233	.26
December	7,930	408	1,590	1.17	1.51
1920					
May	.....	.....	1,630	1.35	1.56
June	20,100	.....	2,780	2.30	2.57
July	.....	.....	275	.227	.26
August	10,300	.....	1,990	1.64	1.89
September	5,910	.....	1,410	1.17	1.30
1920-21					
October	610	.....	261	.216	.25
November	1,290	.....	331	.274	.31
December	4,900	.....	1,560	1.29	1.49
January	3,980	555	1,520	1.26	1.45
February	20,500	1,130	5,800	4.79	4.99
March	10,000	730	2,170	1.79	2.06
April	25,900	525	4,200	3.47	3.87
May	1,940	119	683	.564	.65
June	1,100	.....	459	.379	.42
July	1,600	.....	346	.286	.33
August	3,640	.....	1,030	.851	.98
September	1,100	.....	338	.279	.31
The year	25,900	.....	1,530	1.26	17.11
1921-22					
October	695	12	143	.118	.14
November	7,610	30	2,190	1.81	2.02
December	3,380	473	1,550	1.28	1.48
January	8,690	660	3,090	2.55	2.94
February	14,600	950	3,560	2.94	3.06
March	27,700	1,350	9,160	7.57	8.73
April	16,800	988	4,650	3.84	4.28

May	9,230	730	2,690	2.22	2.56
June	4,580	200	1,360	1.12	1.25
July	558	30	247	.204	.24
August	4,320	20	372	.307	.35
September	200	12	82.4	.068	.08
The year	27,700	12	2,420	2.00	27.13
1922-23					
October	.....		165	.136	.16
November	.....		225	.186	.21
December	18,300	76	4,300	3.55	4.09
January	15,100	690	3,270	2.70	3.11
February	17,200	868	5,860	4.84	5.04
March	13,800	980	5,460	4.51	5.20
April	5,840	1,060	2,320	1.92	2.14
May	11,300	942	3,260	2.69	3.10
June	5,590	342	1,570	1.30	1.45
July	2,190	220	653	.540	.62
August	5,930	215	1,590	1.31	1.51
September	3,980	185	857	.708	.79
The year	18,300	.....	2,450	2.02	27.42
1923-24					
October	195	73	131	.108	.12
November	592	50	190	.157	.18
December	11,100	435	2,930	2.42	2.79
January	25,700	1,200	6,000	4.96	5.72
February	17,900	625	3,720	3.07	3.31
March	8,170	980	2,720	2.25	2.59
April	4,320	625	1,030	.851	.95
May	14,600	465	2,950	2.44	2.81
June	2,780	260	1,010	.835	.93
July	905	106	323	.267	.31
August	405	37	181	.150	.17
September	292	48	146	.121	.14
The year	25,700	37	1,780	1.47	20.02

Note - Mean discharge for October and November, 1922, estimated from discharge at Centerville.

ECONOMIC CONDITIONS

People

"The early settlers in this region were mainly Scotch and English, from North Carolina and Virginia, and the present white population is composed principally of their descendants. There is at present a large negro population. Both the white and colored population is quite uniformly distributed throughout the county, except that a large number of negroes are employed in the phosphate fields. The total population in the county in 1920 was 35,403, of which 29,877, or 84.4 % was classed as rural. The rural population averages 51.3 persons to the square mile." [11]

Schools

"Maury County believes in public education, and in response to the sentiment of the citizens for adequate and modern facilities for the training of their children, public officials have provided generously. Especially have the patrons sacrificed in order to provide the opportunities of a high school education for their children, and to such an extent has the high school building program been carried that it is not necessary for the remote family to send several miles to the county seat in order to get the children in high school. The opportunities have been provided right in the local communities until now there are four high schools, giving the full course, and twelve others giving two or three years of high school work. The Central High School building at Columbia has high rank in the state, but at Mountpleasant, Hampshire, and Culleoka, work of an equally approved nature is being carried on.

"The county board of education which has jurisdiction over the county schools, is composed of seven men elected by the county court.

[11] Soil Survey of Maury County

The county superintendent is, likewise, elected by the county court, and the school organization is now one of the best in the State of Tennessee, being composed of men who are unselfishly and faithfully striving to administer economically the best school system that money can provide.

"Although the county school budget last year (1924) called for $159,000, the county elementary tax rate of $.40 is one of the smallest of any county in the state, about 80 of the 96 having a rate as high or higher.

"List of Schools - The location of white schools by districts is as follows:

" First district - Santa Fe, Graham, Water Valley, Bethel, Akin, Lucketts, Roach, Elmwood, and Johnson.

"Second district - Theta, Athendale, Beech Grove, New Hope, Dark's Mill, Union.

"Third district - Spring Hill, Rally Hill, Pottsville, Kedron, Glenwood, Neapolis, Lanton.

Fourth district - Beechland, Leftwich, Bryants, Union Grove, Nicholson, Groveland, Philadelphia.

"Fifth district - Culleoka, Stiversville, Glendale, Campbell Station, Cuba.

"Sixth district - Mynders, Enterprise, Sullivan, Porters, Sunnyside, Ettaton.

"Seventh district - Sandy Hook, Mt. Joy, Dry Creek, Mt.Pleasant.

"Eighth district - Cross Bridges, Woodrove, Concord, Zion, Union Valley.

"Nineth district - Columbia City schools and McDowell district school.

"Tenth district - Hampshire, Isom. + Taylorsville.

"In addition to the white schools, each district has its quota of colored schools, there being thirty-eight in all, requiring the services of forty-nine teachers, exclusive of Columbia colored school. A very fine feature of the colored schools is the fact that probably forty-five of the forty-nine teachers will be in attendance at some summer normal school.

Facts and Figures

"In the estimated value of elementary school property and equipment at the close of the last fiscal school year, Maury county ranked fifth from the top in the state of Tennessee with a total of $490,750.00, exclusive of high schools. Eighty of the ninety-six counties pay a higher elementary county tax rate than Maury, a fact that is considered remarkable when the high standard of the school system is taken into consideration. On an assessed valuation of about $25,000,000.00, Maury county pays forty cents on each $100 of taxable property for county elementary school purposes and eight cents to the state, making a total of forty-eight cents assessed in the county for elementary school purposes. Ten cents is levied for high school purposes. Although ranking seventh in the state in the amount of taxable property, Maury county ranked sixteenth from the bottom in its elementary school rate at the end of the last fiscal year.

"In scholastic population, children between six and twenty-one years of age, Maury county has 11,482. The total enrollment in the schools was 8,715 in elementary schools and 531 in high schools, making a total of 9,246. The average daily attendance of this number was 6,080 in the elementary grades and 461 in the high schools, a total of 6,541. In the number of elementary teachers employed in the city and county, Maury county ranks eighth with a total of 218.

"Although having a smaller tax rate than a great majority of the counties, the average annual pay of county teachers is $552.78, while the

average for the state is $460.13. The average salary of city teachers is $816.19, while the average in the state is $917.80.

"Libraries abound in both city and county schools, there being 41 in the county schools with a total of 6,257 books and 10 in the city schools with 3,975 books.

Teachers

"The last scholastic report does not include the new high schools that have been completed since June 30, 1924, and when the 1925 report is compiled by County Superintendent Turner, the number of teachers shown to be employed will be larger than the last report. According to the last report, there are 218 teachers employed in the elementary schools, making a total of 247 in the county. Of the elementary teachers, 15 are college graduates; 33 partial college work; 19 normal graduates; 16 partial normal; one academic normal; 93 high school graduates; 32 partial high school and 4 elementary.

"Of the high school teachers, 17 are college graduates; 3 partial; 3 normal graduates.

School Buildings

"Maury County has 96 schools. Of this number Columbia, Mt.Pleasant, Hampshire, and Culleoka give the full high school course. In addition there are 12 that give 2 and 3 high school grades in addition to the elementary course as follows: Santa Fe, Mynders, Spring Hill, Pottsville, Graham, Theta, Rally Hill, Beechland, Enterprise, Sullivan, Cross Bridges, and Woodrow. These buildings and their equipment represent an investment of $767,750. The average length of the county elementary schools is 163 days and of the high schools, 180 days. The length of the city elementary and high school is 180 days.

"Maury county has three educational institutions that are national

in their advertising and patronage.

Columbia Institute

"One of the three above schools referred to is the Columbia Institute, a school for girls and young women, founded in 1835 by Bishop Otey, the venerable pioneer head of the church in Tennessee..... For ninety years the Institute has poured out on the women and the homes of Maury county its beneficent influence. Middle Tennessee cannot escape the benefit of this commendable institution.

".....It is now not only a preparatory school, but offers two years of junior college work, together with special advantaged in music, expression and the other fine arts. Its faculty contributes greatly to the educational values of Columbia, and its students come from far and near.

Branham and Hughes Military Academy

"The Branham and Hughes Military Academy is located in ..... Spring Hill, twelve miles north of the county seat.....

"'B. & H.' as it is locally designated is a modern type of boys school, based on a splendid foundation laid by Professors Branham and Hughes.

Columbia Military Academy

"Columbia Military Academy was founded in 1905 by H. C. Weber, and with the active supervision of Col. J. C. Hardy and Col. Jno. E. Edgerton. The school had the good fortune to have as its home the magnificent property built by the United States Government as a Southern arsenal on land donated by the War Department for school purposes, and the management pays a nominal rental of one dollar per year for a school home valued conservatively at a one million dollar replacement value.

"The Academy has done splendid work in educating, not only the boys

of Middle Tennessee, but the states, north, east, south and west."[12]

RELIGION

"Theearly settlers of Maury county came almost exclusively from Virginia and the Carolinas, and were practically all Protestants and so are their descendants.

"There is only one Roman Catholic church in the county, located on the west side of High Street, (Columbia), having a small membership, served by a priest from Nashville once or twice a month.

"The majority of the early settlers were of Scotch-Irish ancestry, and consequantly Presbyterians in faith, so that the oldest churches in the county are Presbyterians, but they are now outnumbered by the Methodists and members of the Christian Church.

"The Presbyterians have divided into what is known as Presbyterians, U. S., or Southern Presbyterians, Presbyterians, U. S. A., or Northern Presbyterians, who withdrew from the Cumberland Presbyterian church, and united with the Presbyterian Church, U. S. A., and Cumberland Presbyterians, who withdrew from the original Presbyterian church prior to the Civil War, and declined to unite with the Presbyterian Church, U. S. A., as some of them did, and are known as Loyalists.

"There are also Associate Reform Presbyterians, sometimes called Seceders, Their only distinctive feature from the Presbyterians being their use of psalms exclusively in praising God in song. The Presbyterians, U. S., now have two churches in Columbia, First Presbyterian church, located on the corner of West 7th and High streets (Columbia); with a membership of 485; Frierson Memorial, located on the east side of South

[12] "Maury County's Modern Public School System" by Gordon H. Turner, County Superintendent of Education. Published in Maury County Democrat, April 30, 1925

Main Street (Columbia), beyond the Under-pass, having a membership of about 40.

"The Presbyterian Church, U. S. A., known as the Garden Street Presbyterian church, is located on the corner of Garden and 8th street, with a membership of 196; ..... There is also what is known as Central Presbyterian church of this denomination, located between Glendale and Culleoka, with a membership of about 130.....

"They also have two colored churches in the county, one located on the east side of Embargo street, and another in the Zion community, known as Salem church.

First Presbyterian Church

"Columbia --

"The first religious organization in Columbia was that now represented by the First Presbyterian church, corner of West 7th and High streets. It was organized in the year 1811..... This body of Christians worshipped in the court house, a log structure located at the intersection of the public square and East 7th street. In the year 1822 they purchased the lot now occupied by Hardison Motor Company, southeast corner of Garden and West 6th streets, on which in the year 1823 they erected a brick church ..... In the year 1916, the original lot was sold and the present location was purchased ..... at a cost of $10,000.00, and on it was erected the present structure, built of white stone, at a cost of approximately $47,000.00. This denomination has also the following churches in the county, forming what is known as Columbia Presbytery:

"Frierson Memorial, situated south of the railroad with a membership of about 40,..... It is an off-spring of the First Presbyterian church and is due largely to the efforts of its first pastor, Rev. J. Simpson Frierson.

"One at Spring Hill, with a membership of 60, another east of Spring Hill, known as Port Royal, with a membership of 80.....

"One at Mt. Pleasant, a handsome brick building, having a membership of 150.....

"Another on the Bigbyville pike about 8 miles from Columbia, originally called Reeses Chapel, now known as Ebeneezer, one of the oldest churches in the county, having a membership of about 30.....

"Zion church is the oldest religious organization in Maury county, a Presbyterian church, U. S., located about seven miles west of Columbia between the Mt. Pleasant and Hampshire pike.

"It was organized and the first building erected in 1807, by the Scotch-Irish settlers from South Carolina, related by blood and marriage, who remained at their first stopping place in Williamson county until they had erected their log church first and their dwellings next.

"This building was replaced later by a brick structure, which was in turn replaced in 1849 by the present church building - one of the most beautiful country churches to be found in the state. In front of this is Zion cemetery wherein lie the bodies of the original founders and hundreds of their descendants, and in which stand a large number of handsome monuments. The first pastor of this church was Rev. James White Stephanson.....

"..... It has a membership of 126. This branch of Presbyterians have seven churches and 1011 members.

"Garden Street Presbyterian church, U. S. A., was originally a Cumberland Presbyterian church. It is located on the corner of Garden and 8th streets, and is now an imposing brick structure.

"The first building erected on this lot from which the present structure has been evolved was owned by the Cumberland Presbyterian congregation - the lower floor - while the Odd Fellows owned the upper

floor and used it as a lodge room. Subsequently the congregation bought out the Odd Fellows and remodeled the building. Shortly before this church was remodeled , a division led by Gen. Jos. H. Fussell, organized another Cumberland Presbyterian church, and erected a frame building as a place of worship on the west side of South Main street, which was used for a while and then sold and another lot purchased at the corner of South Main and 11th streets, on which a brick church and manse were erected, now occupied by this denomination, which has a membership of 100.....

"The Cumberland Presbyterians, who have remained such, have several churches in the county, one at Scott's Mill, another in Mt. Pleasant, one in Culleoka, one in Santa Fe.....; another at West Point and perhaps the largest congregation of this denomination outside of Columbia is the one known as Pleasant Mount, situated near Fountain Creek Mill, having a membership of 80..... There is another one known as Union Grove near Rock Springs. There is a Cumberland Presbyterian church near McCains.....

"The Associate Reformed Presbyterian Church has only one organization known to us in the county and that is the old historic Hopewell church, located near Bigbyville, established in the fall of 1820, by Rev. Isaac Grier, D. D., of Mecklenburg, N. C. ..... This church now has a membership of about 42.....

"Counting all the different divisions of Presbyterians, there are approximately 2,000 of them in the county.

Methodist Churches

"The Methodist churches in Maury county are divided into circuits; in the Bigbyville circuit there are four churches, having a membership of 390;..... Culleoka and Glendale churches,..... membership 200; Bryant, membership 135 ..... Santa Fe circuit, four churches, membership 442..... South Columbia church, membership 221,... Theta circuit, ... five

churches, membership 533; Hampshire and Cross Bridges circuit, ... three churches, membership 406; Williamsport circuit, ... membership 240, three churches; Mt. Pleasant, ... membership 708; Enterprise circuit, one church in Maury county, membership 104, ... total membership of 25 churches, 4,383, including the 1014 members of the First Methodist church, Columbia,.... This congregation is the largest in Columbia, and having access to a history prepared by the late Thomas Williams, we glean the following facts:

"It is uncertain at what date this church was first organized, but it was between 1815 and 1820. The first record of any pastorate is that Dr. Thomas Maddin, on October 4, 1920, was sent to Columbia by the Tennessee Conference at Hopkinsville, Kentucky, and that on September 20, 1820, the trustees of this church purchased one half of lot 79 on the plan of Columbia on the west side of South Main street, just in the rear of the Gamble store building. ..... The Tennessee Conference met at Norvell meeting house November 7, 1821, and Rev. Hartwell H. Brown was sent to Columbia. During his pastorate, a frame church was built on the lot above mentioned. In 1836, the lot where the present church now stands on West 7th street was acquired and a handsome brick church erected thereon, which was destroyed by fire April 20, 1874. .....

"The present large and commodious building was erected of brick and completed in the year 1878. .....

Christian Churches

"The Church of Christ was organized and began work in Maury county about the year 1848. It has 32 local congregations in the county, in addition to a recent branch, or off-shoot, which was organized and owns what is known as the "Central Christian Church", corner of Garden and 8th streets - the old Gamble home - with a membership of 85 ..... the point

of division being based on the use of instrumental music by this congregation in its house of worship, while the others do not.

"These thirty-two churches are as follows: The First Church in Columbia, located on the west side of High street, with a membership of 400; Second Church in South Columbia, membership 200; Antioch at Leftwich, membership 200; Old Lasea 125; New Lasea 100; Sharp's Corner 75; Brown's Chapel 40; Spring Hill 75; Beech Grove 80; Lanton 60; Darks Mill 30; Theta 50; Fairview 30; Water Valley 50; Arkland 40; Phillippi 60; Kettle Mill 100; South Point 100; Isom 125; Cedar Hill 50; Mt. Pleasant 150; Sandy Hook 30; Mt. Zion 40; Spencer's Grove 100; Bethel 60; Stiversville 80; Culleoka; 50; Campbell's Station 100; Ephesus 40; Scribner's Mill 50; Bryant Station 75; and Berea 60. These 32 congregations have an aggregate of 2,825 members.....

"This body of Christians has organized and is operating what is known as the Tennessee Orphanage, on the corner of West 9th and West end streets, with which they should be credited, for it is a splendid institution.

"They now have in course of erection a very large brick church edifice on the south side of West 7th street, Columbia.

Episcopal Churches

"This body of Christians worshipped first in a small brick edifice erected on the east side of Garden street, in the rear of the Masonic building, about the year 1834. Prominent in the early history of the church in Maury county ware the Rt. Rev. Bishop James Otey and Rev. Leonidas Polk, who was the first clergyman in charge of St. John's and who afterwards became Bishop and Confederate General. Largely through their efforts the Columbia Institute was built in 1837 and has added greatly to the culture of not only this community but of the entire South, and is still a flourishing institution. The original church building in

Columbia was taken down in the year 1863, but meanwhile, in the year 1859, what is known as St. Peter's church was erected on the south side of West 7th street. It is built of brick and of very tasty architecture, both exterior and interior. Recently a handsome parish house has been added. Its membership is 220..... The Episcopalians also have a small congregation of negroes organized and occupying their building at the corner of 8th and Embargo streets.....

"There is an Episcopal church in Spring Hill, with no local clergyman but occasional services. There is another Episcopal church in Maury county which is too historic to be accorded only a passing notice. It is what is known as St. John's, located on the Mt. Pleasant highway about midway between Mt. Pleasant and Columbia, near Ashwood. No congregation now. The cemetery nearby holds the mortal remains of most of the people who founded this historic church, and many of their descendants, and exquisite as well as handsome shafts of marble mark the graves wherein they lie; among them, Rt. Rev. Bishops Otey and Polk, and Brigadier General Hiram B. Granbery; also for a long time, the remains of Major General Patrick Cleburne, placed there at his request, made as he passed it on his way to the fatal battlefield of Franklin.....

"St. John's church was built by the Polk family. It is of brick and has stood for more than 80 years, ivy crowned amid a forest of noble oaks, surrounded by the richest of soil, carpeted with blue grass - a reminder of the religion, culture and chivalry of the old South.

Baptist Churches

"The Baptists have eleven churches in the county, which, according to the Minutes of the Association of September 1923, the latest to which we have access, had membership as follows:

"Calvery, established 1902, members, 32; Columbia First, established

1856, members 362; Columbia Second, established 1914, members 59; Fairview, established 1901, members 69; Friendship, established in 1810, members 235; Knob Creek, established 1856, membership 205; Liberty, established ....., members 25; Mt. Pleasant, established 1913, members 91; Rock Springs, established in ....., members 84; Santa Fe, established 1882, members 44; Theta, established in ....., members 40. Total membership 1923, 1,246.

The oldest Baptist church in the county is Friendship church, located at Culleoka, which was constituted in 1810. Next to the First Baptist church in Columbia, it is the largest and most flourishing, having services every Sunday and a membership of 235.

First Baptist Church - Columbia

"In 1856, June or July, the Baptists, about 13 in number, assembled in the court house and were regularly organized..... A place wasselected on which to build a church but the war coming on, all plans were abandoned for building a house of worship, and during the war the organization was broken up and the members united their efforts with other denominations until 1875 when Benj. Harrison, J. M. Sheppard, John Latta, Sr., Joseph H. Vance and others united their forces and erected a frame building on the corner of High and West 8th streets, completed in June 1876..... In the year 1888 this building was replaced by the present brick structure to which has been added a Sunday School building ..... and the membership as 362.

Primitive Baptists

"These were the first Baptists in Maury county and at one time, they had a number of churches. They had neither Sunday School nor mission work, have been largely merged into what was first called "Missionary Baptists", but now called "Baptists", as they are practically all at present believers

in missions and Sunday School. There is still a church building owned by Primitive Baptists, known as Lynn Creek church, located near the Pulaski pike, south of McCains. Its membership is very small and scattered and services are practically suspended at present.

Nazarenes

"There are a few members of this faith in the county, but not very strong in numbers or organizations. One church was located near Sawdust, and another was started in Columbia, a house and lot having been purchased in South Columbia, beyond the underpass. They have meetings near Caney Springs frequently in the summer.

Negro Churches

"The people of this race in the county, have always, during and since the days of slavery, manifested great religious zeal and probably a larger percentage of them are professing Christians than of the white race.

"In every community of the county where they are found, largely out of their self-denying savings they have erected their church buildings, usually either Baptists or Methodists. For many years after the close of the Civil War the negroes from all over Maury county would gather themselves together on the first Sunday in June at the White Spring, and hold what they called a June meeting. This was an all day affair and a sort of undenominational love feast.

"There are a sprinkling of Presbyterians in the county, all of U. S. A. or Northern connection, one of them of Embargo street, Columbia, a comfortable brick building, and the other known as Salem, near Zion church.

"The Episcopalians who constitute but a small hand full, have a church on the corner of Embargo and Eighth streets. The Nazarenes have recently organized a negro church in Columbia on East Eighth street, and

there is one negro church of Disciples of Christ recently organized in Columbia with a small membership.

St. Paul's A. M. E. Church

"The oldest religious organization among the negroes in Columbia is St. Paul, now located in Macedonia. This body of Christians was organized long before the Civil War and worshipped in a small brick building which was situated at the northwest corner of Greenwood cemetery. Soon after the war in the late sixty's Gray P. Webb made a subdivision which is now called Macedonia and sold the lots to negroes who build their houses and their church in that settlement, and this Methodist congregation erected a very large brick church on one of these lots about the year 1870 which has recently been remodeled and has probably a greater seating capacity than any other church in Columbia, and is a credit to the religious zeal and liberality of this congregaion. ..... There is another A. M. E. church on South Glade street near Eleventh.....

Baptist

"The negroes have four Missionary Baptist churches in Columbia, on East Eighth street, all brick buildings, the First Baptist, Mt. Lebanon, Mt. Caralry, and ..... there is another Baptist church in Happy Hollow .....

"The Primitive Baptist have two churches, one at White Spring ..... another on Galloway street....."[13]

AGRICULTURAL DEVELOPMENT

"The early settlers in this region grew corn, cotton, hemp, and tobacco in a small way for home use. After the Revolutionary War large land grants were made in this territory to officers and men of the colonial

[13] By W. S. Fleming in Maury Democrat, April 30, 1925

forces, and agriculture developed into plantation farming. Transportation was carried on by means of flatboats on Duck River or by means of wagons to Nashville and thence by boats on the Cumberland River. In 1860 the Louisville and Nashville Railroad was built south from Nashville, and since that year the growing of grain and the raising of livestock have practically displaced cotton prodution. General farming as it now exists represents a gradual growth for the last fifty years. The draining of labor from the farms, which began in 1893, when the phosphate deposits were opened, has led to the use of labor-saving machinery and a reduction of the acreage of clean-cultivated crops, especially those requiring considerable hoeing. At the present time the agriculture of Maury County consists of the production of corn, wheat, oats, rye, and sargo, which are largely used in feeding live stock on the farm, and the raising of horses, mules, cattle, hogs, and sheep. Although large quantities of grain are still shipped, most of the farmer's income is from the sale of the finished product live stock."[14] The growing of tobacco is becoming more important each year. Starting in 1920 with only 33 acres, in 1924 the crop sold for around $125,000. Mt. Pleasant has a loose leaf floor and reported sales amounting to around $45,000; while the Association tobacco of the county brought around $100,000 to $125,000.

Corn is by far the most important crop, the acreage in 1919 being 81,918 acres and the production 2,159,421 bushels. The acreage is less than in 1879, when there were 85,496 acres in this crop, but greater than in 1909 when the corn area was only 74,698 acres. The crop is grown by practically every farmer and on every soil. It is planted as early as the 15th of March and as late as the 1st of July. The crop ordinarily matures before killing frost; but when a late, wet spring retards planting and growth, or when the first frost comes exceptionally early in the

[14]Soil Survey

in the fall, some loss may occur.

"Corn is also grown to some extent for ensilage. Yields range around 10 tons per acre, varying with the soil, the system of farming, the fertilization, and the variety grown.

"Wheat, the second crop in importance, is grown mainly in the Central Basin part of the county, on the smoother soils. The acreage in this crop has fluctuated widely during the last 40 years, varying from 43,510 acres in 1879, 26,711 in 1889, 54,843 acres in 1899, and 32,189 acres in 1909, to 23,758 acres in 1919. The production in the last mentioned year was 245,395 bushels.

"The third crop of importance, oats, was grown on a total of 10,453 acres in 1919. The acreage in 1909, which was the largest returned by the census in 40 years, was 18,092 acres, and the production was 178,395 bushels. A large part of the oat crop is cut green and fed in the straw.

"The production of hay in 1879 amounted to 6,569 tons, from 5,911 acres. The 1919 census reports 33,349 acres in hay and forage crops, with a production of more than 43,000 tons. Of this acreage cultivated grasses occupied somewhat less than two-thirds. The most important hay grasses for this county are timothy and clover, which are grown mixed or alone. Clover alone occupied 9,522 acres, clover and timothy mixed 5,288 acres, and timothy alone 1,201 acres. The production of hay from these grasses amounted to 17,525 tons in 1919. The acreage in annual legumes for forage was 4,326 acres and in grains cut for hay 4,552 acres. A few acres were in alfalfa in 1919. Properly cared for fields give satisfactory yields.

"Sorgo is grown quite generally throughout the county for roughage, sirup, and seed. A small acreage is planted for ensilage, but corn is generally preferred for this purpose. The census of 1920 returns the

area grown for sirup in 1919 as 491 acres and the production 18,030 gallons. The Honey variety of sorgo is grown for ensilage; the Orange, Sugar Loaf, and Ribbon Cane varieties for sirup. Sorgo is grown for sirup on practically every type of soil. Where the crop is grown for both seed and sirup, 7 or 8 bushels of seed are sometimes obtained, but the quality of the sirup from the matured crop is not so good as from that cut earlier.

"Crops of secondary importance are rye, barley, cowpeas, soy beans, millet, cotton, cantaloupes, peanuts, sweet potatoes, potatoes and tobacco. Rye is grown for winter pasture and for grain. When sown early it may be used for pasture from November 15 to March 1 and then allowed to produce a grain crop.

"Barley is grown by some farmers in preference to rye for winter pasturage, but it is subject to the attack of the Hessian fly to such an extent that it is not a popular crop. Hungarian and German millets are grown for hay on a few farms.

"Besides their use as forage crops cowpeas and soy beans are grown for the seed and as a means to maintain the productiveness of the soils. Crimson clover also is grown to some extent.

"Sweet potatoes are grown in small patches generally throughout the county. The plants are set from May 15 to June 15 and occasionally as late as the 1st of July. The crop is usually dug about the 1st of October. Yields of 75 to 100 bushels per acre are obtained.

"Cantaloupes are grown to some extent in the vicinity of Culleoka. About 50 carloads per year are shipped from that place. The crop is marketed in late July and early August, following the Georgia crop and preceding the Colorado crop. The Burrel Gem, a pink-meat variety, is grown almost exclusively. Commercial fertilizer is not commonly used, though it is stated that the use of potash ripens the melons more uniformly and improves the netting. It is desirable to grow the crop after clover,

as otherwise it is necessary to use manure. The average yield is about 200 crates per acre.

"Tomatoes are grown by nearly every farmer for home use, and commercially in the vicinity of Columbia. The ordinary yield is 5 to 10 tons per acre. Planting usually takes place in June, and the crop is harvested in August. The Stone variety is favored for canning. All the tomatoes grown commercially are used by local canners.

"There are several commercial apple orchards in the vicinity of Columbia, principally on the gravelly hill soils, but also on the Hagerstown silt loam in locations where the air drainage is favorable. Satisfactory yields and fruit of good quality are obtained. The most popular varieties are the Stayman Winesap, Early Harvest, Delicious, Chicago, and Yates.

"There are a few orchards of cherries in Maury County. The sour cherries have proved more profitable than the sweet varieties. The English Morello, Montmorency, and Early Richmond varieties seem to be preferred.

"Herds of both beef and dairy cattle are kept on most farms. An exceptionally large proportion of the cattle appear to be purebred."[15]

The beef cattle are largely shorthorns, but there are some Angus and Hereford herds. The dairy cattle are almost all purebred Jersey. In the years of 1921-22-23, one hundred and eighty different farmers of Maury County had Jersey cattle registered as shown by records of the American Jersey Cattle Club.

Hogs are kept on all the farms. Duroc-Jersey is the most popular breed. There are several prominent breeders of the Duroc-Jerseys in the county.

"Maury County is most admirable adapted to sheep raising and the

[15]Soil Survey

production of choice spring lambs. The 1920 census gives the county around 16,000 ewes; but no doubt the number will go 18,000 now or probably slightly above. That is an average of only 4½ to the farm. The lamb has consistently made money through all the hard years of the farmer, and promises to do so for years to come. In fact, for the money invested, no other form of livestock returns quite so large a dividend. This county could carry profitably 50,000 head of sheep. It would mean more cover crops and fewer bare spots during winter and a much added income to the farmer. Since Kentucky and California have given the markets a taste of choice ewes and wether lambs, it seems we, in Tennessee are forced to get into the standardization of our lambs. Maury county began this work last year with the county agent and the Farm Bureau working and got about 5,000 lambs standardized. Of 1,921 of these standardized lambs only 271 were seconds; while out of 822 untrimmed or unstandardized lambs sold at the same time and through the same sales, 231 were seconds and thirds. This year 10,000 or more of the lambs of the county have been trimmed and a large percentage of these fed in creeps. The lamb crop of this county together with the wool should bring around a quarter of a million dollars."[16]

"Horses and mules are raised in large numbers. The farm work is done mainly with mules, the horses for the most part being saddle animals and thoroughbred driving stock. Mares of the heavier draft class have been introduced lately, to be used in connection with the local production of larger and heavier mules.

"While large quantities of farm crops are marketed direct, most of the corn and other feed produced reaches the market in the form of finished animals and animal products. In 1919 the total value of domestic live

[16]S. G. Abernathy, County Agr. Agent, in Maury Democrat, April 30,1925

stock on the farms of Maury County was $4,037,030. About half this sum represented the value of horses and mules. Cattle had a value of $1,238,545, of which beef cattle were valued at $672,570 and dairy cattle at $565,975. Some 16,000 sheep had a value of $174,985, and 55,490 hogs a value of $565,109. In 1909 the receipts from the sale of animals sold or slaughtered was $1,866,415. The census does not give this item for 1919, but a comparison of the numbers of cattle and of prices prevailing in the two years make it safe to assert that the income from this source in the latter year could not have been less than in 1909 and probably was considerably greater. In 1909 the value of dairy products, excluding home use, was $211,006, of poultry and eggs $294,490, and of wool and mohair $19,395. These items in 1919 were $320,154, $553,556, and $23,670, respectively.

"The adaptation of the various soils of the county to different crops is in some cases recognized. The gravelly soils and the lighter Culleoka soil are recognized as best adapted to orchards and to truck crops such as cantaloupes and tomatoes. The adaptation of undulating areas of the Hagerstown silt loam to wheat production is also recognized. The Maury silt loam, the Hagerstown silt loam and the gravelly loam, and the Clarksville gravelly loam are considered good soils for potatoes. Sweet potatoes are recognized as particularly suited to the Culleoka and Baxter soils. Gravelly soils or the sandy member of the Culleoka series are considered best adapted to cantaloupes. Tomatoes seem to do best on the gravelly soils.

"The farm buildings are generally small, since comparatively little storage room for roughage is needed. Silos are largely confined to farms where large herds of cattle are kept. Modern farm machinery is used throughout the county. On the larger farms in the basin region such

implements as 3-horse disk plows and 6-horse harrows and drills are in common use, but 2-horse turning plows are generally found on the basin farms and 2-horse hillside plows on the hill farms. Disk harrows are in general use. The farms in this county are exceptionally well fenced. Formerly the farms throughout a large part of the basin region were fenced with cedar rails. During the last few years there has been so great a demand for cedar by pencil manufacturers that most of these rails have been sold and woven wire substituted in fencing. Cedar, locust or chestnut rail fences are still common on farms in the hill section.

"Crops are rotated quite regularly on most farms in this county. The rotation in general use on the Maury and Hagerstown soils consists of corn 1 or 2 years, followed by wheat 1 year, and clover 1 year. Rye or barley may displace wheat, and cowpeas or soy beans, clover. In the vicinity of Mountpleasant, especially on the gently undulating land, corn may be grown 1 year and wheat 2 years, the first wheat crop being followed by cowpeas. When ensilage corn is desired, as is the case on many farms in the vicinity of Spring Hill, corn is grown the first year; wheat, with which is seeded red clover, the second year; clover the third year; and wheat followed by ensilage corn, and the latter by rye or red clover seeded in late fall, the fourth year.

"Very little fertilizer is used in Maury County. The use of ground limestone or air-slaked lime has been found necessary in order to successfully grow alfalfa and red clover.

"The greater part of the farm labor is done by the operator and his family. In 1919, 1,301 farms, or about one-third the number in the county, used hired labor, mainly negroes, at a total expenditure of $467,180, or $359 per farm. Labor is not hard to obtain, and wages range from 75 cents to $2 a day. Farm hands by the month are paid $20 to $40 and board.

In harvest time from $2.50 to $4.00 a day is paid.

"The total number of farms in the county in 1919 was 3,728. The average size is 94.1 acres, of which 63.5 acres is improved land. There are very few holdings of over 1,000 acres. Sixty-three per cent of the farms were operated by owners in 1920, and 36.3 per cent by tenants. Land is usually rented on shares. The tenant furnishes stock and implements and pays one-half the harvested crop. As a rule, crops are shipped direct to the markets.

"There is a wide range in the selling price of land in this county, depending mainly on the soil, location, and improvements. In some sections of the county, particularly in the vicinity of Columbia, Mountpleasant, and Spring Hill, the farm buildings, including the dwellings, are large and substantial with modern improvements, and they greatly increase the value of the farms. Here land values may range from $175 to $250 an acre. Ordinarily equipped, productive farms are valued at $50 tp $125 an acre. Land in the glade areas is very low in price, in some cases selling for $4 an acre."[17]

"An act of the State Legislature of 1916-1917 made available funds for establishing and improving an experiment station for the Middle Division of the State and also provided funds for running the plant after it was once established. Through the action of the county court of Maury County the experiment station was located in that county. The bill passed by the State Legislature provided no funds for purchase of land, it being necessary for the county that secured the location of the experiment station to furnish this. Funds for buying the land were provided by the county court and by individual gifts of citizens and corporations in the county. As provided in the bill that made the establishment of an experiment station in Middle Tennessee the lands and properties set aside for this

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purpose were deeded to Tennessee and the management was placed in the hands of the University of Tennessee. Therefore, the Middle Tennessee Experiment Station is a state institution managed as a part of the University of Tennessee for the peculiar benefit of agricultural and livestock interests of Middle Tennessee."[18]

The following tables are compiled from the Census of Agriculture, 1925, and explanations which accompany this Census Report are applicable for these tables:

I. Farm and Farm acreage 1925, 1920, 1910

II. Farm values, mortgage debt, and miscellaneous items, 1925, 1920, 1910

III. Livestock on farms, Jan.1, 1925, and live stock products, 1924 and 1919.

IV. Value of crops and acreage and production of principle crops, 1924

V. Farm population by age, sex, and color, 1925.

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[18]R. L. Neel, Supt., Maury Democrat, April 30, 1925

TABLE I

Item	The State	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Number of farms...1925.....	252,669	3,899	4,849	1,866	3,584	600	2,728	3,296
1920.....	252,774	3,728	5,299	1.928	3,590	537	2,560	3,355
1910.....	246,012	4,039	5,152	1,979	2,202	538	2,707	3,015
Farms, by size, 1925:								
Under 3 acres.....	200	1	-----	-----	-----	---	1	-----
3 to 9 acres.....	18,040	277	222	21	192	28	151	139
10 to 19 acres.....	35,801	503	703	70	435	95	272	419
20 to 49 acres.....	78,143	1,055	1,660	375	1,047	180	662	824
50 to 99 acres.....	63,000	944	1,240	555	1,025	139	806	801
100 to 174 acres.....	38,258	684	691	542	601	93	556	640
175 to 259 acres.....	11,566	255	202	183	164	41	191	271
260 to 499 acres.....	6,161	139	101	103	106	23	82	163
500 to 999 acres.....	1,242	37	28	17	8	1	6	36
1000 to 4,999 acres.....	268	4	2	-----	6	---	1	3
5,000 acres and over.....	10	-----	-----	-----	-----	---	-----	-----
Farmers, by color and tenure, 1925:								
Total.....White.....	218,022	3,160	3,801	1,747	3,521	581	2,430	2,790
Colored.....	34,647	739	1,048	119	63	19	298	506
Full owners..White.....	121,219	1,518	1,732	1,135	1,473	314	1,336	1,524
Colored.....	7,086	226	225	78	27	9	79	148
Part owners..White.....	18,191	397	331	121	316	36	254	256
Colored.....	2,131	122	114	21	14	4	35	68
Managers.....White.....	396	9	8	-----	5	---	3	3
Colored.....	18	-----	1	-----	-----	---	-----	-----
Tenants.....White.....	78,306	1,236	1,730	491	1,727	231	837	1,007
Colored.....	25,412	391	708	20	22	6	184	290
Tenants-cash								
White.....	7,784	148	171	64	72	23	81	126
Colored.....	2,658	19	31	1	-----	1	6	15
Croppers...White.....	25,725	318	611	440	428	37	208	318
Colored.....	14,848	189	436	1	9	---	127	170

TABLE I - continued

	The State	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Other tenants								
White.....	44,797	770	948	387	1,227	171	548	563
Colored.....	7,906	183	241	18	13	5	51	105
Percentage of tenance..1925..	41.0	41.7	50.3	27.4	48.8	39.5	37.4	39.4
1920..	41.1	36.3	51.1	28.4	40.4	38.7	37.5	36.5
1910..	41.1	38.5	49.3	30.3	28.5	30.1	36.3	36.5
FARM ACREAGE AND LAND AREA								
Approximate land area, 1925								
1925,..acres.....26,679,680		372,480	401,920	364,800	391,040	183,040	241,920	375,040
Per cent in farms	67.1	86.6	83.5	55.3	68.9	24.2	93.0	82.5
All lands in farms,								
1925...acres.....17,901,139		322,603	335,498	201,726	269,509	44,278	224,893	309,590
1920...acres.....19,510,856		350,971	358,485	235,945	270,947	57,308	223,974	331,151
1910...acres.....20,041,657		365,321	357,722	250,807	235,790	67,314	227,539	323,168
Average per farm, 1925..	70.8	82,7	69.2	108.1	75.2	73.8	82.4	93.9
Classification of farm land, 1925:								
Crop land, total.acres..	7,588,506	142,596	146,536	75,638	111,785	16,431	97,651	121,059
Crop land harvested in 1924.....acres..	6,209,428	121,576	125,780	56,975	93,205	12,598	82,403	105,481
Crop failure.....acres..	110,907	2.067	795	507	568	98	1,023	2,179
Idle or fallow land.....								
111..acres..	1,268,171	18,953	19,961	18,156	18,012	3,735	14,225	13,399
Pasture land, total.....								
.....acres..	4,697,449	130,838	123,161	33,357	43,979	5,750	90,389	140,240
Plowable pasture.acres..	2,588,462	63,735	82,596	20,135	17,486	3,500	40,617	55,794
Woodland pasture.acres..	1,364,386	46,506	25,010	7,947	21,303	2,157	34,478	66,808
Other pasture....acres..	744,601	20,597	15,558	5,275	5,190	93	15,294	17,638
Woodland not used for pasture.....acres..	4,198,111	26,823	42,954	81,539	104,633	20,595	19,796	25,433
All other land in farms..								
.....acres..	1,417,073	22,346	22,847	11,192	9,112	1,502	17,502	22,858
All farm land, by tenure, 1925:								
Full owners.....acres...11,518,843		170,928	194,069	149,342	145,962	32,903	129,176	188,355

TABLE I - continued

	The State	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Part owners.....acres...	1,506,602	45,561	36,967	12,430	26,922	4,183	27,663	36,530
Owned land....acres...	1,001,904	27,745	23,211	7,870	17,979	3,509	18,223	24,310
Rented (hired) land....acres...	504,698	17,816	13,756	4,560	8,943	674	9,440	12,220
Managers.....acres...	124,365	3,047	2,424	-------	162	-------	751	690
Tenants.....acres...	4,751,329	103,067	102,038	39,954	96,463	7,192	67,303	84,015
Cash tenants..acres...	615,093	14,817	16,035	6,744	4,919	883	5,936	14,216
Croppers.....acres...	1,221,812	18,755	27,076	2,039	15,917	847	13,843	19,402
Other tenants.acres...	2,914,424	69,495	58,927	31,171	75,627	5,462	47,524	50,397
Crop land harvested, by tenure, 1924:								
Full owners.....acres...	3,018,255	47,521	45,893	36,446	40,385	6,434	36,219	49,712
Part owners.....acres...	619,861	20,214	16,069	5,302	10,235	1,342	12,633	14,409
Managers.....acres...	29,799	1,275	475	-------	127	-------	233	402
Tenants.....acres...	2,541,513	52,566	63,343	15,227	42,458	4,822	33,318	40,958
Cash tenants..acres...	262,643	5,674	5,201	2,534	2,052	459	1,917	5,090
Croppers.....acres...	864,961	13,044	22,610	874	8,889	744	8,870	12,417
Other tenants.acres...	1,413,909	33,848	35,532	11,819	31,570	3,619	22,531	23,451

TABLE II

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
FARM VALUES							
Land and buildings..							
1925..dollars	19,304,051	14,030,812	5,039,337	7,329,398	999,560	10,751,141	17,201,967
1920..dollars	27,102,101	23,918,298	6,234,792	11,004,437	1,374,715	16,958,126	24,038,354
1910..dollars	16,558,621	10,935,804	3,514,085	2,975,381	737,335	7,512,195	12,065,815
All farm property,..							
1925..dollars	22,027,373	16,571,336	6,158,879	8,711,047	1,268,257	12,607,467	19,667,625
Land, excluding buildings							
..dollars	13,802,893	10,195,438	3,876,360	5,254,654	689,135	7,629,147	12,210,571
Buildings alone							
..dollars	5,501,158	3,835,374	1,162,977	2,074,744	310,425	3,121,994	4,991,396
Implements and machinery							
..dollars	827,233	773,729	298,858	470,905	85,482	449,160	763,567
Live stock on farms							
..dollars	1,896,089	1,766,795	820,684	910,744	183,215	1,407,166	1,702,091
Average values (dollars):							
All farm property,per farm,							
..1925	5,649	3,417	3,301	2,431	2,114	4,622	5,967
Land and Buildings, per farm,							
.. 1925	4,951	2,894	2,701	2,045	1,666	3,941	5,219
Land and buildings, per acre,							
..1925	59.84	41.82	24.98	27.20	22.57	47.81	55.56
..1920	77.22	66.72	26.53	40.75	23.99	75.71	72.59
..1910	45.33	30.57	14.01	12.62	10.95	33.01	37.34
Land excluding buildings, per acre,							
..1925	42.79	30.39	19.22	19.50	15.56	33.92	39.44
Farm values, by tenure, 1925:							
Land and buildings, total							
..dollars	19,304,051	14,030,812	5,039,337	7,329,398	999,560	10,751,141	17,201,967
Full owners							
..dollars	10,844,031	8,149,110	3,316,242	3,989,252	611,950	6,444,146	10,584,697
Part owners							
..dollars	2,426,737	1,824,608	412,555	647,395	71,860	1,359,842	1,702,740
Managers.dollars	313,090	137,625	---------	8,750,000	---------	39,750	124,000

TABLE II - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Tenants..dollars	5,720,193	4,419,469	1,310,540	2,684,001	316,650	2,907,423	4,790,530
Cash tenants.. ..dollars	36,040	34,413	22,560	7,795	2,780	9,460	43,560
Croppers..... ..dollars	41,164	68,281	1,610	16,109	3,857	16,682	46,916
Other tenants. ..dollars	146,652	136,798	56,171	105,654	20,320	91,966	111,782
FARM MORTGAGE DEBT, 1925							
All farms operated by owners:							
Total number	2,263	2,402	1,355	1,830	363	1,704	1,996
Number reporting mortgage debt	612	608	208	636	100	455	538
Per cent of total	27.0	25.3	15.4	34.8	27.5	26.7	27.0
Farms operated by full owners:							
Total number	1,744	1,957	1,213	1,500	323	1,415	1,672
Number reporting mortgage debt	482	479	187	506	86	377	420
Acreage of farms reporting debt	52,308	54,904	30,084	54,490	10,943	37,952	54,709
Value (land and buildings)dollars	3,933,720	2,768,144	860,677	1,793,897	280,450	2,065,280	3,887,510
Amount of mortgage debt	1,662,257	1,209,745	377,692	851,629	102,072	914,933	1,594,196
Ratio of debt to value, per cent	42.3	43.7	43.9	47.5	36.4	44.3	41.0
Avarage per mortgaged farm -							
Value of land andbuildings, .. dollars	8,161	5,779	4,603	3,545	3,261	5,478	9,256
Mortgage debt.dollars	3,449	2,526	2,020	1,683	1,187	2,427	3,796
Average per acre -							
Value of land and buildings, ..dollars	75.20	50.42	28.61	32.92	25.63	54.42	71.06
Mortgage debt.dollars	31.78	22.03	12.55	15.63	9.33	24.11	29.14

TABLE II - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
MISCELLANEOUS ITEMS							
Farm expenditures, 1924, for -							
Feed dollars	125,159	122,284	47,020	76,144	24,233	136,236	129,947
Farms reporting	1,183	1,542	616	1,289	297	1,189	823
Fertilizer (including lime) dollars	4,456	20,469	8,371	100,813	5,885	7,509	6,696
Farms reporting	98	640	347	2,954	228	275	187
Farm labor (money wages only) dollars	250,299	103,513	48,007	48,675	8,845	105,437	209,180
Farms reporting	1,133	1,096	371	763	131	841	863
Lumber, posts, firewood, etc...dollars	41,974	45,167	6,132	24,968	1,689	22,632	15,536
Farms reporting	389	627	107	312	47	314	153
Cooperative Marketing, 1924:							
Value of farm products sold..dollars	53,393	188,421	2,145	132,313	1,340	19,196	37,329
Value of supplies purchased..dollars	5,555	69,305	150	10,139	------	9,239	3,040
Farm facilities, 1925:							
Tractors on farms	90	62	44	47	4	55	144
Radio outfits, farms reporting	21	14	1	16	1	16	32
Silos (farms reporting corn cut for silage)	148	42	4	3	------	108	74
Kind of road, 1925:							
Total number of farms	3,899	4,849	1,866	3,584	600	2,728	3,296
Farms located on							
Concrete or brick road	------	17	3	-------	------	-------	-------
Macadam road	49	61	------61	-------	------	251	21
Gravel road	2,325	2,397	614	67	170	1,391	1,916

TABLE II - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Improved dirt road	340	50	48	710	286	352	67
Unimproved dirt road	1,088	2,231	1,200	2,789	142	723	1,129
All other (including not reported)	80	107	4	18	2	11	163

TABLE III

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
LIVESTOCK, 1925							
Value of all livestock ..dollars	1,896,089	1,766,795	820,684	910,744	183,215	1,407,166	1,702,091
Horses:							
Total number	6,061	6,459	1,351	2,307	336	4,805	4,442
Colts under 2 years of age	596	586	48	102	19	358	376
Horses 2 years old and over	5,465	5,873	1,303	2,205	317	4,448	4,066
Total value.dollars	291,130	344,697	66,590	125,049	16,420	233,140	214,580
Mules:							
Total number	6,680	6,754	3,752	4,812	887	4,158	6,194
Mule colts under 2 years of age	736	794	142	201	26	637	619
Mules 2 years old and over	5,944	5,960	3,430	4,611	861	3,521	5,575
Total value.dollars	493,072	519,284	273,220	382,737	68,198	300,118	459,610
Cattle:							
Total number	21,432	20,717	8,663	8,999	2,445	19,174	21,060
Calves under 1 year of age	4,635	4,972	2,551	2,335	749	4,017	4,055
Heifers 1 year old and under 2	3,575	2,513	984	1,099	257	2,790	2,939
Dairy heifers	2,569	1,027	257	707	10	2,231	2,328
Beef heifers	1,006	1,486	727	392	247	559	611
Cows 2 years old and over	10,649	9,610	3,871	5,202	1,164	9,830	11,159
Dairy cows	8,376	6,317	3,232	3,978	80	7,961	9,947
Beef cows	2,273	3,293	639	1,224	1,084	1,869	1,212
Steers 1 year old and over	2,164	3,303	1,161	157	247	2,158	2,582
Bulls 1 year old and over	409	319	96	206	28	379	325
Total value..dollars	501,689	425,498	191,611	203,082	44,982	458,865	521,001

TABLE III - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Sheep:							
Total number	20,104	8,804	3,640	778	814	8,526	16,023
Lambs under 1 year of age	2,209	1,114	492	182	184	655	983
Ewes 1 year old and over	16,948	7,172	2,920	547	556	7,486	14,467
Rams and wethers 1 year and over	947	518	228	49	74	385	573
Total value.dollars.	151,267	48,507	23,241	4,218	5,973	64,603	121,804
Goats:							
Total number	1,958	3,918	390	1,080	1,113	3,411	3,555
Total value.dollars	3,720	7,052	741	1,944	2,115	6,481	6,755
Swine:							
Total number	29,948	21,516	19,042	6,738	2,849	18,982	22,943
Pigs under 6 months of age	18,566	12,548	9,821	4,207	1,482	12,648	13,349
Breeding sows 6 months and over	3,688	4,087	2,150	797	328	2,809	4,115
All other hogs	7,694	4,881	7,071	1,734	1,039	3,525	5,479
Total value.dollars.	239,372	194,322	165,562	57,840	24,700	146,832	192,984
Chickens:							
Total number	250,109	244,702	109,647	145,300	22,570	223,083	219,928
Total value.dollars.	197,586	212,891	86,621	126,411	17,830	176,236	173,743
Other livestock, estimated value .. dollars...	18,253	14,544	9,098	9,463	2,997	20,891	11,614
LIVESTOCK PRODUCTS:							
Number of cows milked, 1924	9,428	8,577	3,040	4,869	916	9,050	11,245
Dairy cows milked	8,280	6,463	2,957	4,085	61	7,969	10,562
Beef cows milked	1,148	2,114	83	784	855	1,081	683
Milk produced*, 1924 .gallons..	2,705,836	2,564,523	871,796	1,777,185	335,630	2,687,850	3,317,275

TABLE III - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Milk produced, 1919 gallons	1,914,089	2,440,740	1,119,258	1,604,432	360,488	1,779,800	2,332,100
Average per cow milked, 1924 gallons	287	299	287	365	366	297	295
Butter made on farms, 1924, pounds	426,527	573,843	221,488	544,700	97,993	243,772	261,917
Butterfat sold, 1924, pounds	258,950	151,243	2,280	3,498	-------	451,385	314,237
Cream sold, 1924 gallons	19,239	8,790	-------	3,547	350	15,763	51,664
Whole milk sold, 1924 gallons	186,542	73,754	2,455	28,432	2,600	349,422	832,295
Value of dairy products, 1924, dollars....	288,465	239,928	63,529	161,233	28,630	347,728	289,580
Wool:							
Number of sheep shorn*, 1924*	18,536	7,880	2,996	558	641	7,716	15,558
Wool produced*, 1924, pounds	72,374	32,496	13,825	2,229	2,269	30,591	65,342
1919, pounds	63,758	25,052	12,610	5,649	4,231	34,589	84,241
Value of wool, 1924 dollars	29,673	12,348	5,668	847	930	12,542	26,790
Eggs and chickens:							
Chicken eggs produced*, 1924 dozens	821,358	577,741	357,230	494,747	51,821	946,318	807,356
1919, dozens	1,006,135	1,186,877	339,671	571,252	82,599	945,076	786,630
Value of chicken eggs, 1924, dollars	221,767	155,990	96,452	133,582	13,992	255,506	217,986
Chickens raised*, 1924 number	306,384	318,113	143,528	208,070	35,322	242,714	244,120

TABLE III - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Chickens raised*, 1919, number	306,162	344,788	116,149	163,796	31,641	231,119	215,601
Value of chickens raised, 1924 dollars	183,830	213,136	86,117	139,407	21,193	145,628	146,472

*Including estimated for incomplete reports.

TABLE IV

	Maury	Giles	Hickman	Lawrence	Lewis Mar	Marshall	Williamson
Value of crops with production reported in 1924...dollars	2,610,767	3,054,630	1,332,586	2,624,092	293,551	1,730,553	2,690,670
Value of same crops in 1919..dollars	5,997,461	6,478,230	2,152,306	3,544,974	493,114	3,295,877	4,760,408
ACREAGE AND PRODUCTION, 1924							
Grain and forage crops:							
Corn, total acreage	70,153	76,807	33,256	47,997	7,294	43,881	55,142
Harvested for grain..acres	65,190	75,039	31,449	47,531	7,288	39,957	52,402
bushels.....	1,360,895	1,598,901	754,625	914,794	152,325	873,672	1,377,689
Cut for silage acres.....	487	576	65	16	------	1,208	1,078
tons.....	3,132	3,884	720	110	------	7,750	8,418
Cut for fodder acres	859	380	246	389	6	549	582
Hogged off..acres.	3,617	812	1,496	61	------	2,167	1,080
Wheat.....acres.	12,897	2,324	1,975	2,219	169	5,236	11,124
bushels.	149,919	23,628	18,225	22,725	1,917	57,610	147,276
Oats threshed for grain...acres.....	3,979	1,424	608	400	38	1,662	2,523
bushels...	82,504	25,823	11,238	7,584	844	32,368	49,937
Oats cut and fed unthreshed..acres...	2,306	2,440	3,506	412	935	2,960	1,592
Barley.....acres...	482	31	15	11	------	77	931
bushels...	8,193	364	235	180	------	1,382	16,944
Rye.....acres...	289	113	28	361	7	262	626
bushels...	2,701	663	251	2,761	45	1,423	5,470
Buckwheat...acres...	------	------	------	8	------	------	------
bushels...	------	------	------	136	------	------	------
Sorghums harvested for grain..acres..	36	16	28	6	------	46	72
bushels.	310	170	199	55	------	569	947

TABLE IV - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Sorghums for silage, hay, or fodder ..acres.....	2,260	2,240	1,641	394	349	1,869	1,547
Peanuts...acres.....	1	5	2,077	33	138	4	7
bushels.....	25	171	63,719	830	4,443	100	105
Velvet beans..acres..	-----	20	18	------	------	35	6
Dry edible beans (navy, etc.).acres.	-----	47	95	25	------	2	16
Hay crops:							
Total acreage	22,971	18,122	11,922	13,180	2,658	21,182	22,423
Timothy alone ..acres....	872	2,188	623	143	40	925	1,225
Timothy and clover mixed ..acres.....	3,723	3,792	2,121	696	1,466	3,820	5,300
Clover-red, alsike, and mammoth ..acres.....	8,685	2,993	2,142	1,563	8	4,607	5,714
Clover-sweet, crimson, and Japan ..acres.....	142	186	17	88	------	265	280
Alfalfa..acres..	892	92	118	37	7	81	439
Other tame grasses ..acres.....	3,365	3,180	2,626	1,221	251	6,979	4,336
Small grains cut for hay..acres..	1,542	1,606	646	3,690	23	667	861
Annual legumes cut for hay..acres..	3,500	3,964	2,575	5,590	843	3,442	3,751
Wild grasses cut on farms..acres.	250	121	1,054	152	20	396	517
Total quantity of hay of all kinds, both tame and wild..tons ..tons.....	21,501	17,904	9,425	10,428	2,767	22,182	24,353

TABLE IV - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Miscellaneous crops:							
Cotton...acres....	1,448	18,784	645	25,764	525	1,639	1,123
bales....	752	6,630	244	10,406	174	569	424
Sorghum for sirup. acres.....	474	406	193	497	82	306	355
Tobacco..acres....	551	46	234	153	2	28	1,099
pounds..	444,640	29,155	154,280	114,918	1,000	23,385	921,400
Potatoes, white .. acres...	749	343	304	478	40	151	553
bushels...	45,327	20,812	22,871	32,618	3,720	9,730	30,490
Sweet potatoes and yams...acres....	143	79	166	318	48	45	156
bushels...	9,272	4,645	14,743	27,949	3,826	3,144	9,714
Strawberries.acres	36	55	3	11	------	11	7
Vegetables grown for dale:							
Cabbages...acres...	14	------	-------	1	------	------	8
Cantaloupes and muskmelons..acres...	212	112	1	9	------	39	13
Lettuce...acres...	1	------	1	------	------	------	------
Onions (dry) acres	4	------	------	------	------	------	4
Sweet corn.acres..	20	4	------	1	------	10	12
Tomatoes..acres...	319	17	23	6	1	31	256
Watermelons.acres.	128	43	16	36	14	52	51
Orchard fruits and nuts:							
Apples..trees not of bearing age	21,088	6,360	6,937	19,385	779	5,131	13,925
trees of bearing age	39,224	27,525	22,039	34,762	6,289	23,235	53,442
bushels harvested	58,190	29,934	35,409	55,810	14,366	21,202	50,213
Peaches..trees of all ages	27,175	33,370	30,267	33,313	6,440	22,795	23,020
bushels harvested	29,259	41,944	43,249	40,955	13,595	31,111	18,886

TABLE IV - continued

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
Pears.... trees of all ages	4,022	2,343	1,152	2,197	564	2,058	1,775
Plums and prunes.. trees of all ages	2,166	1,224	2,884	2,393	379	2,580	497
Grapes..vines of all ages	4,537	3,355	1,773	8,771	477	3,786	3,638
Pecans..trees not of bearing age	126	111	65	23	11	188	96
trees of bearing age	42	40	21	27	------	136	51
Forest products:							
Firewood cut on farms in 1924*..cords	35,042	34,056	27,199	41,586	6,498	22,440	24,738

*Value of firewood is not included in the crop total.

TABLE V

	Maury	Giles	Hickman	Lawrence	Lewis	Marshall	Williamson
All farm population:							
Total	17,257	20,067	9,479	17,159	2,794	10,851	14,959
Under 10 years of age	4,151	5,263	2,656	5,214	785	2,515	3,664
10 years of age and over	13,106	14,804	6,823	11,945	2,009	8,336	11,295
Male	6,725	7,463	3,589	6,234	1,024	4,171	5,775
Female	6,381	7,341	3,234	5,711	985	4,165	5,520
White Farm Population:							
Total	13,256	15,053	8,837	17,934	2,718	9,283	12,018
Under 10 years of age	3,115	3,818	2,474	5,156	774	2,047	2,894
10 years of age and over	10,141	11,235	6,363	11,778	1,944	7,236	9,124
Male	5,199	5,671	3,357	6,134	987	3,619	4,671
Female	4,942	5,564	3,006	5,644	957	3,617	4,453
Colored farm population:							
Total	4,001	5,014	642	225	76	1,568	2,941
Under 10 years of age	1,036	1,445	182	58	11	468	770
10 years of age and over	2,965	3,569	460	167	65	1,100	2,171
Male	1,526	1,792	232	100	37	552	1,104
Female	1,439	1,777	228	67	28	548	1,067

INDUSTRIAL DEVELOPMENT

Maury County's industries include: baking, bottling, manufacturing of clothing, manufacturing of chairs, milling of cotton, creameries, canneries, fertilizer manufacturing, grain and feed milling, ice manufacturing, ice and cold storages, job printing, lumbering, meat packing, marble working, machine shops, phosphate mining and preparation, and steam laundrying.

The United States Census report for manufacturing for 1920 yields the following data:

County	Wage earners Average No.	Wages	Rent & Taxes	Cost of Materials	Value of Products	Value Added by Mfg.	Primary H. P.	No. of establishments
Maury	431	$312,002	$60,017	$3,049,851	$4,166,187	$1,116,336	2844	59
Giles	93	63,880	4,240	249,980	397,515	147,535	1105	41
Hickman	169	132,203	1,828	167,315	377,693	210,378	1753	39
Lawrence	219	153,946	3,905	416,067	760,587	344,520	1179	56
Lewis	131	81,381	56,491	443,460	673,695	230,235	1228	18
Marshall	347	283,228	4,802	692,599	1,141,063	448,464	1153	34
Williamson	169	117,608	4,022	495,115	784,220	289,105	983	37

The phosphate industry is the most important one, and the figures for it, as stated by the U. S. Census report, 1920, are as follows: (for the State at large)

Item	Total U. S.	Tennessee
Number of enterprises	48	19
Number of mines	69	23
Number of enterprises operating beneficiating plants	20	10
Mineral land operated .....acres	160,477	23,452
Land controlled, total .....acres	241,810	25,738
Mineral land owned .....acres	156,418	22,073
Mineral land held under lease ..acres	4,029	1,379

Timber and other lands .....acres	81,363	2,286
Capital	$72,733,956	$14,657,494
Principal expenses	$ 9,364,154	$ 2,538,424
Salaries and wages of officers, supts., mgrs., and technical employees	$ 566,477	$ 120,111
Clerks	$ 194,946	$ 54,692
Wage earners	$3,900,966	$1,174,759
Supplies and materials	$ 2,161,501	$ 638,533
Fuel	$ 1,739,833	$ 379,182
Purchased power	$ 79,468	$ 1,750
Royalties and rents	$ 209,687	$ 70,553
Taxes - Federal, State, County, local	$ 347,580	$ 63,423
Contract work	$ 163,696	$ 35,421
Expenditures for development (included in Principal Expenses)	$ 353,237	$ 32,065
Value of products	$10,300,198	$ 3,139,671
Persons engaged in industry	4,761	1,674
Proprietors and officials	223	59
Proprietors and firm members	14	5
Salaried officers	43	16
Superintendents and managers	106	31
Technical employees	60	7
Division of Clerks		
Male	134	38
Female	31	9
Wage earners (average)	4,373	1,568
Power used (H. P.)	49,639	7,168
Fuel Used		
Coal, anthracite tons, 2240#	28	none
Coal, bituminous tons, 2000#	121,273	89,029
Coke, tons , 2000#	146	none
Fuel oils, bbls.	657,284	245
Gasoline and other volatile oils, bbls.	10,871	42
Wood, cords	39,961	5,679
Phosphoric acid produced in 1919		
Number of establishments	9	none
Total production, #	22,109,302	none
For sale, #	13,379,501	none
Value (for sale)	$ 1,711,148 - per # - $.13	

The figures for the entire State are included since Mt. Pleasant especially, and Maury County, in general, is the center about which the phosphate industry operates, and the following table, taken from the 31st annual report (1925) of the Mineral Resources of Tennessee, Dept. Labor, Division of mines, shows the relationship of Maury to the other producing

counties.

County	Employees			Product (Long Tons)			Value of Products
	Total No. Em - ploy- ed	Aver- age daily wages	Total am't paid for labor	Blue Rock	Brown Rock	Total Product	
Giles	65	$2.74	$21,746		17,296	17,296	$ 92,025
Hickman	50	2.50	36,392		17,525	17,525	93,882
Lewis	140	2.56	100,703	48,251	296	48,547	212,354
Maury	746	3.03	604,599		358,833	358,833	1,511,572
Total	1019	$ 2.76	$763,440	48,251	393,950	442,201	$1,909,833

A history of the production and value of phosphate in Tennessee is shown in the following table taken from "The Resources of Tennessee", published by the State Geological Survey, 1914.

Year	Long Tons	Value	Year	Long Tons	Value
1894	19,188	$ 67,158	1905	482,859	$1,633,389
1895	38,515	82,160	1906	547,677	2,147,991
1896	26,157	57,370	1907	638,612	3,047,836
1897	128,723	193,115	1908	455,431	1,877,221
1898	308,107	498,392	1909	333,003	1,286,193
1899	424,109	1,177,166	1910	398,188	1,503,350
1900	454,491	1,328,707	1911	437,370	1,714,017
1901	409,653	1,192,090	1912	423,331	1,640,476
1902	390,799	1,206,647	additional		
1903	460,530	1,543,567	1920	635,000	5,000,000 (estimated)
1904	530,571	1,745,054	1924	318,642	1,674,112
			1925	442,401	1,909,835

It has been estimated that the available phosphate rock in the U. S. at large is 5,810,692,000 long tons; of this amount, 85,000,000 tons are available in Tennessee.

In addition to the phosphate rock plants, there are two large factories engaged in manufacturing complete commercial fertilizers.

At Rockdale is located the only blast furnace in the country which produces ferro-phosphorous. The following table, taken from 31st annual report of the Mineral Resources of Tennessee, shows the extent of the

production of pigiron in Maury County in 1925.

Average number of employees	75
Average wages paid per day	$3.37
Average days active	229
Total wages paid	$ 80,561
Iron ore treated (long tons)	12,086
Pig iron produced	9,111
Total value of product	$613,443

Plans are being made at this time to run a transmission line from Muscle Shoals to Nashville, and if this is done it may be found profitable to transfer the manufacture of ferro-phosphorous from Anniston, Alabama, to Maury County where the supply of phosphate will be at hand.

The creamery industry is an important one. The U. S. Census Report shows for the County:

Number of cows milked, 1924	9428
Dairy cows milked, 1924	8280
Beef cows milked, 1924	1148
Milk produced, 1924, gallons	2,705,836
1919, gallons	1,914,089
Average per cow milked, 1924, gallons	287
Butter made on farms, 1924, pounds	426,527
Butterfat sold, 1924, pounds	258,950
Cream sold, 1924, gallons	19,239
Whole milk sold, 1924, gallons	186,524
Value of dairy products, 1924	$ 288,465

There are two creameries in Columbia, other than the Borden plant, and these two combined produce 1600 pounds of butter daily. During the summer these creameries produce from 750 to 1000 gallons of ice cream daily.

There is no recent data in regard to the creamery industry in Maury County, but the following portion of an article contributed June 1927 by J. J. Murry of Lewisburg to the manufacturers' Record is indicative of its rapid growth there.

"Only in the last few years has Tennessee attracted much attention by

its increased manufacture of high-grade creamery butter. From three creameries operating in 1914, producing less than 300,000 pounds, with a scant value of $100,000, the industry has increased in a period of 11 years to 44 creameries,with a total production in 1925 of 12,179,430 pounds of butter. The cheese industry was established in 1916 and has grown to 12 factories that in 1925 produced a total of 274,347 pounds, valued at $63,400. These factories are located in communities not accessible to markets for fluid milk or cream, one being in West Tennessee and the others in East Tennessee.

"All the cheese factories and 19 of the creameries are operated co-operatively, 13 of the latter, together with 8 commercial plants, being in the 11 bluegrass counties of Middle Tennessee. The largest co-operative creamery in the South is located in Murfreesboro. Its production in 1925 was 1,207,931 pounds while that for 1926 is estimated to have been over 1,500,000 pounds."

In 1927 five Borden Milk Co. plants were opened in Middle Tennessee, being located in Shelbyville, Fayetteville, Columbia, Pulaski, and Lewisburg.

Flour and corn milling is another of the foremost industries, the value of the products being over $2,000,000 annually.

"Poultry shipping is a ranking industry. Several large plants with cold storage facilities are engaged in preparing and shipping dressed poultry. A number of wholesale shippers of live poultry add a large sum to the total business transacted, the total running from $2,000,000 to $2,500,000 per year."[19]

"There is a cotton mill engaged in ginning, spinning, and weaving, turning out a large volume of sheetings annually. This plant operates 7,000 spindles and 200 looms and consumes 2500 bales of cotton annually."[20]

19 Maury Democrat
20 Ibid

There is another gin which operates no spindles.

There is a large factory which cans tomatoes, pumpkins, and sweet potatoes.

A work and sport clothing manufacturing concern was established in 1926. More than 150 people were employed by this company in 1927; its annual payroll was $150,000 and its customers numbered more than 5,000.

The number and kinds of industrial concerns are listed:

2 Chair factories
1 Clothing manufacturing plant
1 Cotton mill
2 Cotton gins
3 Creameries
9 Flour and corn mills
14 Fertilizer and phosphate companies
1 Harness shop
3 Ice plants (2 with cold storage facilities)
1 Iron furnace
5 Lumber or lumber mill companies
4 Machine shops
2 Stove Manufacturing companies.

TRANSPORTATION

The transportation facilities of Maury County are quite adequate, being served by good railway and highway systems.

Railway -

A main line of the Louisville and Nashville Railroad passes from Cincinnati and Nashville through Spring Hill, Kleburne, Carters Creek, Karks Mill, Godwin, Columbia, Glendale, Pleasant Grove, Culleoka, and Campbells Station to Birmingham and New Orleans. The Nashville Florence and Sheffield division of the L. and N. leaves the main line at Columbia and passes through Ashwood, Ridley, Mt.Pleasant, Sandy Hook, and Rockdale, terminating at Sheffield. A branch line for freight service leaves the L. and N. at Ashwood and goes to the Harlan Mines. The Swan Creek Branch of the L. and N. leaves Mt. Pleasant and passes through Seth to serve the

phosphate field at Gordonsburg and the Swan Creek region, and there are several other short branch lines out of Mt. Pleasant to the various phosphate plants.

A branch line of the Louisville, Chattanooga, and St. Louis Railroad leaves Columbia, passing through Fountain Creek Station, Hills Station, Park, Bryants Station, and Silver Creek.

The Middle Tennessee Railroad, which is not operating at the present time, is between Mt. Pleasant and Franklin, and it is connected with Nashville by means of the Nashville-Franklin Interurban. The stations in this line are Bigby, Cross Bridges, Foster Chapel, Arkland, Watervalley, Fly, McKnight, and Bethel. A branch line from Watervalley serves Leatherwood.

A statement of the 1st and 6th class of freight rates in cents per 100 pounds between Mt. Pleasant and Columbia and some of the important market cities is given for the L. and N. Railroad.

	Mt. Pleasant		Columbia	
Destination	1st Class	6th Class	1st Class	6th Class
Atlanta, Ga.	$1.31	$.69½	$1.17	$.65
Birmingham, Ala.	.99	.43	.98½	.40
Boston, Mass.	2.00½	.86½	2.45	.84
Charleston, S. C.	1.87	.89½	1.95	.64½
Chattanooga, Tenn.	.92	.55½	.70	.42½
Chicago, Ill.	1.88	.91	1.79½	.72
Cincinnati, Ohio	1.39½	.70	1.18½	.58
Cleveland, Ohio½	1.92	.92½	1.85½	.74½
Detroit, Mich.	1.97	.98½	1.85½	.74½
Jacksonville, Fla.	1.68	.76	1.61	.63
Knoxville, Tenn.	1.39½	.72		
Little Rock, Ark.	1.85	.81		
Louisville, Ky.	1.04	.58		
Memphis, Tenn.	1.15	.63½	1.12½	.55½
Mobile, Ala.	1.49	.76	1.35	.62
New Orleans, La.	1.59½	.74½		
Nashville, Tenn.	.56½	.24½	.49½	.20½
New York, N. Y.	1.93½	.83½	2.37½	.81
Philadelphia, Pa.	1.93½	.83½	2.37½	.81
Richmond, Va.	1.83½	.79		
St. Louis, Mo.	1.55	.78	1.30½	.65
Washington, D. C.	1.83½	.79		

(The rates from Mt. Pleasant were furnished by the Mt. Pleasant

Station. Those for Columbia were copied from Industrial Survey of Columbia, Southern Cities Power Co.)

Highways -

There are two federal-aid highways in Maury County - the Jackson Highway which runs from Through Spring Hill near the Williamson County line and through Columbia and Mt. Pleasant and through Rockdale near the Lawrence County line. The link of the Highway between Spring Hill and Columbia is of asphalt construction on macadam foundation. The link between Columbia and Mt. Pleasant is of concrete construction, and the link between Mt. Pleasant and the Lawrence County line is oiled limestone and chert construction.

The Bee Line Highway is a paved highway between Columbia and the Giles County Line.

Highly developed bus and freight truck lines are operated on these roads. The schedules are regular, and service is to be had almost hourly.

Markets -

Maury County is well situated in regards to markets. It is not so far from the center of population of the nation, and its railway and highway systems make communication convenient. The stock markets are Nashville and Louisville, are readily accessible, the fruit markets of the east are within easy reach, the fertilizer and phosphate markets of the cotton and corn regions are near and nearly equidistant, the flour and corn mill products are near the market which lies in the cotton belt, the ferrophosphorous markets of the south, east and middle west are readily accessible, the market for dairy products is open on every side, but this is particularly true of the eastern market with which Maury County is directly connected by the main line of the L. and N. which offers through freight service.

Power -

Maury County is furnished power by the Southern Cities Power Co. This company is a very large generator and distributor of power in this section of the state. The source of supply is one hydro-electric plant and one steam plant, both of which are within the city limits of Columbia. The Tennessee Electric lines are tapped at Murfreesboro and the transmission lines are brought to the county. (See Map No. for layout of transmission lines of the State.)

The supply of power is unlimited.

Maury County lies within radii of 50 and 85 miles of Muscle Shoals and will be benefitted by any distribution of power from that inexhaustible source.

"At no time has any territory served by the Southern Cities Power Company ever experienced a shortage of power, and no industry has ever been forced to run on part time due to insufficient power."[21]

Power Rates -

The rates for power as given by the Southern Cities Power Company in their Industrial Report of Columbia is as follows:

Service Classification "A"

Metered Power - Wholesale

Alternating Current, Single or Three Phase

Where the actual demand as measured in 15 K. W. or more and the combined power and lighting not less than 25 K. W., connected load, the lighting load, the lighting load may be combined with the power load under this rate, provided the lighting load is not more than 20% of the total demand.

Determination of Demand

[21] Industrial Report of Columbia, Tenn., p. 9, published by Southern Cities Power Co., July 1926

By measurement, highest 15 minute demand but not less than 15 K. W. nor less than 60% of the total K. W. contracted for, nor less than 60% of the highest demand of the previous six months.

Demand Charge

$1.50 per K. W. of demand per month.

Energy Charge

4¢	per	K.W.H.	for	the	first	500	K.W.H.	used	per	month.
2	"	"	"	"	next	1500	"	"	"	"
1½	"	"	"	"	"	2500	"	"	"	"
1¼	"	"	"	"	"	3500	"	"	"	"
1	"	"	"	"	"	17000	"	"	"	"
.8	"	"	"	"	"	25000	"	"	"	"
.7	"	"	"	"	"	250000	"	"	"	"
.6	"	"	"	"	"	400000	"	"	"	"
.5	"	"	"	"	"	700000	"	"	"	"

Minimum Charge

$1.58 per K. W. per month of the highest demand of the previous 6 months, but not less than $1.58 per K. W. per month of the demand contracted for nor less than $39.47 per month.

Discount

The current monthly bill is subject to a discount of five per cent (5%) provided the account is paid in full within ten days from date of bill.

Term of Agreement

From date of connection until discontinued on 30 days' notice of one party to the other or on nonpayment of bills for service.

Rates based on 60% load factor, 26 day month, 10 hr. day

Kilowatt Demand	25	50	75	100	150	300	500
60% Load factor	15	30	45	60	90	180	300
K.W.H. Demand	3,900	7,800	11,700	15,600	23,400	46,800	78,000
Columbia, Tenn.	2.81	2.48	2.30	2.24	2.07	1.87	1.76
Knoxville, Tenn.	3.41	2.77	2.40	2.21	2.02	1.83	1176
Charlotte, N. C.	3.34	2.83	2.55	2.41	2.21	1.94	1.81
Roanoke, Va.	3.01	2.58	2.35	2.20	2.05	1.90	1.70
Louisville, Ky.	3.45	3.04	2.82	2.65	2.47	2.27	2.15
Little Rock, Ark.	3.56	2.92	2.71	2.60	2.39	2.18	2.07
Chattanooga, Tenn.	2.89	2.48	2.27	2.17	2.07	1.87	1.76

Note: The cost per K. W. H. is expressed in cents.

Coal -

The sources of the supply of coal for industrial purposes are: Alabama, East Tennessee, and East and Western Kentucky coal fields. This coal is of high quality and may be placed in the bins at a total cost of from #3.50 per ton up.

The following is an analysis of an East Tennessee coal.

Fixed carbon	62.11%
Volatile Matter	36.16%
Moisture	.67%
Ash	1.8 %
Sulphur	.49%
B. T. U.	15,037

Labor Conditions -

The labor to be found in Maury County is of an exceptionally high class. The white population is composed almost entirely of Anglo-Saxons, and they are, as a rule, industrious and energetic. At the present time, the supply of labor meets quite adequately the demands, but it cannot be said that there is a large oversupply of labor. All work is done on an open shop basis and the workers seem well satisfied. There has never been a labor strike in Maury County.

The wage scale in Maury County is very well portrayed by the figures given below:

Common Labor	25¢ to 30¢ per hour
Brick-layers	$1.50
Carpenters	50¢ to 60¢
Plasterers	$1.50
Lathers	30¢ to 40¢
Painters	45¢ to 65¢
Cement Workers	40¢ to 50¢
Plumbers	$1.00
Steam fitters	$1.00
Electrical workers	65¢
Roofers	40¢ to 60¢
Teams	$5.00 per day

TAXES

Outline of the State Laws and Procedure Affecting Manufacturing Industries

The following information on taxes furnished by Albert W. Taber, tax counsel for the Chattanooga Manufacturers Association is copied from "Industrial Survey of Territory Served by the Tennessee Electric Power Company."

Property Taxes:

In General

All real estate of industrial corporations is assessable for taxation.

All tangible personality, in the state, of such corporations is assessed, excepting,

Inventories which are the products of the soil in the hands of the producer from the soil or his immediate vendee, and

Inventories of goods in process of manufacture and goods manufactured, in the hands of the manufacturer thereof.

This inventory exemption from taxation is peculiar to Tenn. and grows out of a provision of the state constitution and taxing acts which were designed to encourage manufacturing in Tennessee.

All intangible property, such as cash, notes, choses in action, etc., is assessable except in the hands of exempt organizations and excepting government bonds and other public obligations, and excepting stock or corporation property, of which is taxed to the corporation. The exempt stocks are stocks in all Tennessee corporations, except stocks in financial institutions and insurance companies.

These specific items of intangible property of industrial

corporations, however, are not assessed specifically as such but are indirectly assessed in that they go to make up the value of the capital stock of the corporation, from which is computed the intangible corporate personality assessment as explained in detail hereafter.

Each taxpayer gets $1,000 specific exemption from the personality assessment.

Total Assessment of Industrial Corporations

Manufacturing, mining and all industrial enterprises are assessed for state, county, and municipal purposes upon the total of: (a) their real estate situated in the state, (b) tangible personality in the state and (c) intangible personality value, if any, computed as shown hereafter. The computation of the intangible personality assessment is in the nature of a "corporate excess" assessment now in vogue in the more progressive states. Tennessee allows certain deductions and exemptions from the "corporate excess", however, which are not allowed by other states.

If all the property and business of a foreign industrial corporation is located in Tennessee, such corporation is assessed as if it were a domestic corporation. No attempt has ever been made to assess the intangibles of foreign corporations, however, which have only branches in Tennessee, such corporations being assessed only upon their tangible property in the state.

Valuations

Real estate, including buildings, is assessed by the local county assessor by personal inspection and is assessed at considerably less than its actual cash value. From our investigations we find that residence property is assessed on an average of from 70% to 80% of its actual value; down-town business property at 60% to 70% and industries at 50% and under as seen by reports on individual towns hereinafter. Hence it can be seen that industries are favored by low assessments as compared with other

taxable properties.

Assessed valuation for machinery and other tangible property are taken from the balance sheet which must be furnished to the assessor by each corporation. These valuations are fixed for valuational anywhere from 50% to 100% of the balance sheet values, depending upon the nature and actual condition of the property. If the corporation can produce evidence that the book values are not the actual values, then the assessment is made to conform to the actual values.

The intangible personality of corporate excess is computed, as shown hereafter, from the balance sheet of the corporation, due allowance being made for adjustments from book values to get the same to actual values, also considering non-taxable inventories and securities owned.

Income or Excise Tax:

The Tennessee 3% Excise Tax is in effect a corporation income tax although not so termed. It is an annual tax of 3% of the net earnings of the corporation for the preceding fiscal year "arising from business done wholly within the state, excluding earnings arising from inter-state commerce."[22]

In practice this tax is computed as 3% of that portion of the annual earnings (less Federal income tax) that the amount of sales for the year to customers in Tennessee bears to the amount of total sales.

All annual state privilege taxes may be deducted from this tax as credits. The annual corporation franchise of license tax is a deductible credit.

This tax is not found burdensome by industrial corporations as most of such corporations have a large portion of their sales outside the state and hence only a small portion of their earnings is subject to this 3% tax.

Annual Franchise or License Tax:

[22]Chapter 21, 1923

This is a small assessment on authorized capital stock of domestic and foreign corporations. The tax ranges from $5 on $25,000 to $150 on $1,000,000 and over. "No par value" stock is taken as having a value of $100 a share for the purpose of this tax.

Initial Taxes on Corporations:

The fee for incorporating and receiving a charter from the state is 1/10 of 1% on the authorized capital stock, plus certain nominal and recording fees.

Foreign corporations are required to pay entrance fees upon admission to do business in the state according to a graduated scale basis upon the total authorized stock, ranging from $50 on $50,000 or less authorized capital stock to $1,500 on an authorized capital stock of $5,000,000 or over.

If a foreign corporation locates its principle office in the state and does all its business in and from Tennessee and has all of its main property holdings in Tennessee, the initial tax is the same as for a domestic corporation.

"No par value" stock is taken to have a value of $100 a share for the purpose of the initial taxes.

Special Privilege Taxes:

Various classes of occupational privilege taxes or licenses are levied but few apply to industrial corporations.

"Much confusion has existed regarding the method of computing corporate personality assessments of manufacturing corporations operating in Tenn.

These assessments are computed anew each year for the purposes of assessment of state, county, and municipal personality taxes.

The assessments are first computed by the local assessor from data contained in Schedules "C" and "F", which are filed with his office. (Schedule "C" for domestic corporations; Schedule "F" for foreign Cor-

porations.) They are then reviewed by the local Equalization Board. These assessments are then further reviewed and checked by the State Equalization Board in Nashville against data filed direct from the Department of Finance and Taxation on Form "C" and "F".

The Schedules and Forms mentioned above require balance sheets taken from the corporations books and other supporting data, necessary to enable the authorities to compute a proper assessment.

All manufacturing corporations are assessed under the assessment law of 1907.[23]

Foreign Corporations:

In the cases of Express Co. V. Patterson (1909), 122 Tennessee 279 and Fertilizer Co. V. McFall (1913), 126 Tennessee 645, it was held that the intangible personality of a foreign corporation could not be taxed as there was no machinery provided for its assessment. However, the State Attorney General in 1926 ruled that foreign corporations having their entire plants and properties in Tennessee should be assessed for property taxes as domestic corporations are assessed. No attempt has been made,however, to assess the intangibles of foreign corporations having only branches in Tennessee.

Domestic Corporations:

The computation of the personality assessment of the domestic corporation is somewhat complex.

General Thompson's method has been followed now since 1923 and has been generally accepted as the construction of the law which gives the most equitable assessment.

This method, as shown in appended copy of letter is as follows:

(a) First, ascertain the actual value of the shares of stock and

[23]Chapter 602, Acts of 1907

surplus, to which should be added the amount of bonded indebtedness.

(b) Next, assess the real estate and tangible personality.

(c) Next, deduct from the total of the stock, bond and surplus the combined sum of the real estate, tangible personality, exempt inventories, and exempt securities. The remainder, if any, represents the value of the intangible property to be assessed.

The total assessment of the corporation is then the sum of the actual cash value of:

1. The real eatate

2. Tangible personality

3. Intangible personality as computed under (c) above.

As previously stated, the "Thompson method" has been generally accepted. It places foreign and domestic corporations on more nearly an equal footing than any other method. The Thompson method also equalizes assessments between the different domestic corporations, as it is primarily based upon the corporations net worth (capital and surplus.)

The law states that the assessment shall be made upon "actual cash values".

General Thompson's opinion states that the personality assessment should begin with the "actual value of the shares of stock including the surplus".

As we begin our computation with the actual value of the "capital stock and surplus", we must first ascertain what the actual value is. This can only be done by fixing an actual cash value for the assets and ascertaining the true amounts of all actual liabilities. The difference between the sum of the actual cash value of all the assets and the sum of all actual liabilities will then be the actual cash value of the capital and surplus.

Note

Sec. 22, Chapter 602, 1907 provides that every manufacturing corporation "shall pay an ad valorem upon the actual cash value of its capital stock or corporate property,.....which said value shall not be less than the actual cash value of both its shares of stock and its bonded debt,....." In Sloan V. City of Columbia (1920) 144 Tennessee 197, it was held that "capital stock " and "corporate property" are used throughout Chapter 602, Acts 1907, as synonymous terms. To illustrate:

Domestic Manufacturing Corporation Balance Sheet

Assets	Book Value	Actual Value
Cash	$10,000	$10,000
Accounts Receivable	38,000	30,000
Notes Receivable	2,000	1,500
Inventories Taxable	15,000	15,000
Inventories Non-taxable	50,000	50,000
U. S. Bonds	15,000	15,000
Real Estate	20,000	20,000
Machinery	50,000	50,000
Total Assets	$200,000	$166,500
Liabilities and Capital		
Accounts Payable	$10,000	$10,000
Notes Payable	15,000	15,000
Liabilities not on books		10,000
Bonded Debt	25,000	25,000
	$50,000	$60,000
Capital Stock	$100,000	
Surplus	50,000	
	$150,000	
Total Liabilities and Capital	$200,000	$166,000

From this above it can be seen that although the "book value" of this stock is only $150,000 the "actual cash value" of the stock is only $106,500.

As the amount for capital and surplus in the balance sheet is always

the difference between the assets and the liabilities (i.e. $166,500 less $60,000 equals $106,500), the difference between the capital value and book value is shown to be due to certain adjustments of the values of assets and liabilities as follows:

	Book Value	Actual Value	Difference
Accounts Receivable Accrued losses not charged off on books	$38,000	$30,000	$ 8,000
Notes Receivable Accrued losses on notes not yet charged off	2,000	1,500	500
Real Estate Assessed figure as fixed by local assessor. Obsolete buildings.	20,000	15,000	5,000
Machinery Obsolete machinery still in use but of little value	50,000	30,000	20,000
Liabilities not on Books Judgment in damage suit against company not yet put on books		10,000	10,000
Total Difference			$43,500

Proof of Difference	
Book value of stock	$150,000
Actual value of stock	106,500
Difference	$43,500

It is the adjustment of the values of the assessments and liabilities that gives us the adjusted or actual value of the "capital stock and surplus".

It is this actual value that must first be obtained before we can compute the assessment.

As this actual value is the direct result of a combination of assets and liabilities at actual values, then in order to make a consistent computation, figures from the "actual value" balance sheet must be used throughout. Otherwise errors and inconsistencies will creep in and an

incorrect relationship between tangibles and intangibles will be reflected.

The actual values to be used should first be determined and supported by proper evidence; next the capital and surplus figure should be adjusted so as to reflect these actual values, as shown in the balance sheet previously given; then with this adjustment balance sheet the computation can be made beginning with the actual value of the "capital stock including surplus" determined as set out above, using actual values throughout the computation.

It has sometimes been contended that under the Thompson method as now generally accepted, no reduction can be given a corporation in its assessment, for depreciation on notes and accounts receivable which depreciation is due to accrued bad debts not charged off on the books, nor for liabilities not shown on the books.

However, if one will analyze this computation and follow it through step by step, it will be seen that such an allowance can and should be made.

Under this method we begin our computation with "the actual value of the shares of stock including the surplus" - not "book value" but "actual value".

Now if the assets in the balance sheet such as accounts receivable are stated at a figure above their "actual cash value" the book value of the capital and surplus is consequently likewise over stated.

For example, in the balance sheet shown, the book value of accounts receivable is $38,000 and this figure has been carried into the surplus of $50,000, in making up the balance sheet. The actual value of the accounts receivable is only $30,000. Hence it can be seen that the book value of the surplus is overstated in the amount of $8,000. A reduction of $8,000 in surplus must be made to get down to the "actual value" of the surplus.

Hence it can be seen that, when we begin our computations with the "actual value of the shares of stock, including surplus" as directed by the Thompson opinion, we first arrive at that actual value by reducing the book value of the capital and surplus by the same amount as the book values of the asset exceed actual values of same, if such excess exists.

This adjustment of capital and surplus, with which we begin our computation automatically gives the corporation the benefit of a reduction in its assessment on intangibles, for depreciation on notes and accounts receivable.

A similar adjustment for liabilities not on books is shown in the illustration herein given.

On page will be found the illustrations of computation of the corporate personality assessment for a domestic manufacturing corporation.

This computation, beginning with the actual cash value of the capital and surplus and using actual value figures throughout, is,in the opinion of the writer, the correct method of computing an assessment.

It effects the assessment of all items of taxable property, both tangible and intangible, at their actual cash values.

It has been shown that the assessments on intangibles is computed by starting with the actual value of the capital stock and surplus (plus bonded debt, if any) and deducting therefrom the combined sum of the real estate, tangible personality (both otherwise assessed), the exempt inventories and the exempt securities - the remainder, if any, representing the value of the intangible personality to be assessed.

The method shown herein gives allowance against the actual value of the capital stock and surplus for all these credits at values which are both the values of such items as taken above in the computation for assessment purposes, and at the same time are the values of such items as

have previously been used in making up the adjusted balance sheet from which the actual value of the capital stock and surplus has been obtained.

The absolute consistency of this method from both a legal and an accounting standpoint can be seen.

			Assessment Value
Actual value capital stock		$106,500	
Actual value of Bonds		25,000	
		$131,500	
Less: Tangible Property, Actual Value # Real Estate	$15,000		
Machinery	30,000		
Taxable Inventories	15,000		
Total Tangibles		$ 60,000	$60,000
Difference (Intangibles)		$71,500	
Less: Exemptions, Actual Value Securities		15,000	
Inventories		50,000	
Specific exemption		1,000	
Difference Intangible		$66,000	
Personality to be assessed		$ 5,500	$ 5,500
Total Assessment subject to state, county and Municipal tax			$65,500
Personality Assessment:			
Total Assessment		$65,500	
Less: Real Estate, Assessed Value		15,000	
Personality Assessment		$50,500	

Note:

The total personality assessment is made up of:

Tangible Personality		
Machinery	$30,000	
Taxable Inventories	15,000	$45,000
Intangible Personality		$ 5,500
Total Personality		$ 50,500

The direct product of the soil in the hands of the producer or his immediate vendee

This provision is being interpreted very strictly by the State Equalization Board. They have held that to be non-taxable the product must be the direct product of the soil. Such materials as are originally produced by the soil and manufactured into a finished product by one concern or individual and then sold to another manufacturer to be further used in the manufacture of his product have been held to be taxable inventories

to the second manufacturer, even though the second manufacturer is the "immediate vendee" of the producer from the soil. This ruling is based upon the contention that such material is not the "direct" product of the soil.

The courts have not passed upon this specific question.

Workmen's Compensation Laws:

Workmen's compensation insurance laws in Tennessee are considerate. The law states that the employee, when injured at work, shall receive half his wages per week, while the injury prevents him from working. The maximum period of time is 300 weeks. If the injury prevents him from working for six weeks the compensation starts on the first day of disability; otherwise it does not begin until after seven days. The maximum compensation that can be paid is $4800 if there are no dependents, and $6750 if there are three dependents. (The laws apply to both male and female workers.)

The law in brief follows:

A Digest of The Tennessee Workmen's Compensation Law

System Provided For

Compensation elective. System provided for. Acceptance of employer and employee presumed unless notice is given. State Factory Inspector. Either party may change election by thirty day's notice. (Section 3-4)

Alternative Liability

If employee accepts and the employer rejects, defense of assumption of risk, fellow servant's fault, and contributory negligence, unless wilful, are abrogated in case of damage suit by employee. If the employer accepts and employee does not, present defences remain. (Section 11)

Employments Covered

All employments except casual, where less than ten are regularly em-

ployed, agricultural and domestic employees and common carriers doing interstate commerce. In cases where less than ten are regularly employed and in case of coal operators and in the cases of the State of Tennessee, counties thereof and municipal corporations, the employer may accept the Act by giving thrity days' notice, but may, without notice, fail to accept the Act and retain common law defenses. (Section 6)

Injuries Covered

Personal injuries by accident arising out of and in the course of employment, excepting those due to employee's wilful misconduct, intentional self-inflicted injury, intoxication or wilful failure or refusal to use a safety appliance or perform a duty required by law. (Section 10)

Notice of Injury and Claim for Compensation

Notice of injury shall be given immediately upon the occurrence of an injury or as soon thereafter as is reasonable or practicable, unless employer has actual knowledge of the accident. No compensation payable unless written notice is given employer within 30 days, unless reasonable excuse is made. Claim must be made within one year after injury, or be barred. (Section 22-24)

Waiting Period

In case of temporary disability, no compensation allowed for a period of fourteen days after injury unless disability continues for as long as six weeks, in which event compensation is allowed beginning with the day after injury. (Section 26)

Medical and Surgical Aid

Employer must furnish medical aid, including crutches, for a period of thirty days after injury, provided that the total liability shall not exceed $100. In the event of death, employer to pay burial expenses to the extent of $100. (Section 25)

Compensation for Total Disability

Fifty per cent weekly wages maximum $11, minimum $5 weekly, or weekly wages under $5 weekly; maximum period 300 weeks, if temporary. In cases of injury resulting in permanent total disability, maximum period 550 weeks, subject to weekly rate of $5 after first 400 weeks, and maximum total of $5,000. (Section 28-a)

Compensation for Partial Disability

Fifty per cent of payment of earning capacity, maximum $11 weekly, maximum period, 300 weeks. Specific schedule of compensation for loss of various members. Compensation for death computed on the basis of the number and kinship of dependents. Maximum $11, minimum $5, or full wage under $5. Maximum period, 300 weeks, In case of partial dependence, full amount of income loss subject to the maximum. In addition, expenses of burial to the extent of $100. (Section 28-b)

Who Are Dependents

Prima Facie or conclusive presumption of dependency is established in case of a wife and dependent children, and in certain other cases. Dependents otherwise limited to certain relatives wholly or partially supported by the deceased, and for a reasonable period prior thereto. (Section 30)

Medical Examination

Injured employee must submit to medical examination at reasonable times, and refusal suspends right to compensation. (Section 25)

Settlement of Claims and Disputes

Settlement may be made between employer and employee according to schedule fixed by Act, a copy to be filed with State Factory Inspector and Circuit Court Judge. In case of dispute either party may submit to the County Judge, Circuit Judge, Chancellor, or Criminal Judge. Appeal from County Judge to Circuit Judge, where case is heard de novo, without the right of either party to jury. The decision of the Circuit Judge,

Chancellor or Criminal Judge subject to review by Supreme Court. (Section 32)

Communications

Periodical payments may be commuted to a lump sum equal to the present worth of future installments, discounted at six per cent, if approved by the court. (Section 36)

Preference

Right to compensation has same preference against employer's assets as unpaid wages for labor. (Section 17)

Assignments and Exemptions

Claim for compensation is not assignable, and is exempt from seizure or sale for any debt or liability. (Section 18)

How Compensation is Secured

Exployer must insure in company satisfactory to Insurance Commissioner, or must give satisfactory bond or satisfy the Commissioner of his financial ability to pay the awards. House Bill 481, passed at present session of the General Assembly provides for the admission into the State of mutual casualty and other companies, and provides for the organization under the laws of this State of mutual Companies. (Section 41)

Method of Payment

Compensation payable direct to employee by employer or insurer; payments to be made at same intervals as wages as near as possible. (Section 30)

Attorney's Fees

Attorney's fees must be approved by the court, and in no case be more than twenty per cent of recovery. (Section 33)

Minors

Minors of legal working age are given same contractual power as adults. Compensation to a minor is in lieu of any claim by parents for loss of services. (Section 7)

Where Injury Caused by Third Party

Where right of accident exists against third party, employee has option of proceeding against third party for damages or claiming compensation from employer. If latter, employer is subrogated to the employee's rights against third party, but must pay the employee any amount recovered in excess of compensation and cost of action. (Section 14)

Principal and Sub-Contractor

Principal contractor secondarily liable to employees of his sub-contractor. (Section 15)

Suits for Damages

When elected, compensation is the exclusive remedy for injuries covered by this Act as to the employee, personal representative or next of kin. (Section 8)

Posting Notices

Written or printed notices of employee's election to reject or change of elections must be posted at places of business, with duplicate to State Factory Inspector. (Section 4)

Penalties

Employer who deducts from his employee's wages any portion of his insurance cost guilty of misdemeanor in event of failure to carry insurance, give bond, or satisfy Commissioner of his ability to pay award. (Section 41)

Constitutionality

If any of the provisions of the Act are held unconstitutional, it shall not affect the remaining portions. (Section 48)

Miscellaneous Provisions

In death claims, where the cause of death is obscure or in dispute, any interested party may require an autopsy at his own expense. (Section25)

A Digest of Principal Changes Continued in The Amendment of The Tennessee Workmen's Compensation Law as Approved April 1, 1923, by The Legislature, Effective July 1, 1923

Waiting Period

In case of temporary disability, compensation starts on the eighth day instead of the fifteenth.

Increased Compensation

The maximum amount that can be recovered under the amendment has been increased from $11 to $12 per week, with a further increase of $13 in case of one dependent; $14 for two dependents; and $15 for three or more dependents.

Employers, Firms, or Associations Subject to the Act

Number of employees required to be employed by the employer, firm or association reduced from ten to five.

Coal Mines

This amendment also provides that employers engaged in the operation of coal mines and employees thereof shall come under the Act in the same manner as other trades or occupations.

"Coal Operators Protective Fund"

The amendment provides for a "coal operators protective fund" to be used in case of a catastrophe in the mines.

Labor Laws - Hours of Work

Labor legislation is favorable to industry. For females there is a 10½ hour day limit and a 57 hour week limit. There is no minimum wage law for female laborers. There are no night work laws for females over 16. There is no limit to the hours the male laborer may work. Child labor laws prohibit the working of children under 14 years of age except in domestic and agricultural work. Children under 16 and over 14 may work 8 hours a day and 48 hours a week. Those included in this limit may not work before 6 a.m. or later than 7 p.m.

Banking Facilities -

Maury County has nine banks, and their combined deposit is approximately $3,500,000. There has been a continual and steady growth in the amount, and this growth has not been due to "booms" or abnormal business conditions.

Living and Health Conditions -

"Maury County is a prosperous agricultural district. The farm houses and other buildings are usually in a fair state of repair. Public schools and churches are well distributed throughout the county. Rural mail delivery reaches all parts of the county, and telephones are in extensive use throughout the rural districts."[24]

The figures given in the tables below are taken from the mortality records of the states named, and the statistics for 1924 and 1925 were not available for the states other than Tennessee.

Deaths from All Causes

	1925	1924	1923	1922	1921	1920	1919
Tennessee	11.3	11.6	11.9	10.8	10.7	12.1	12.2
Mass.			13.	12.8	12.2	13.8	13.6
N. Y.			13.	13.	12.3	13.8	13.9
R. I.			13.8	13.1	12.6	14.3	14.2
Pa.			13.3	12.3	12.4	13.8	13.4
Conn.			12.	12.	11.4	13.6	13.3
N. J.			12.3	12.2	11.7	13.	13.1

Pneumonia, All Forms

Tennessee	87.6	108.5	98.2	87.6	74.5	117.2	102.1
Mass.			130.9	129.9	102.6	156.1	133.9
N. Y.			120.8	125.	101.2	160.2	166.4
R. I.			135.8	126.9	102.8	163.1	144.7
Pa.			156.8	134.6	129.7	181.7	157.1
Conn.			115.7	115.	91.5	155.7	134.2
N. J.			117.6	117.8	97.8	154.2	158.7

[24]Soil Survey, p. 155

Pneumonia and Influenza

	1925	1924	1923	1922	1921	1920	1919
Tennessee	140.9	154.4	195.	146.	94.9	220.	234.
Mass.			151.4	147.	107.5	197.	207.8
N. Y.			146.1	144.	109.	205.4	233.7
R. I.			159.6	155.4	109.2	223.	239.2
Pa.			201.5	167.5	146.9	251.4	236.5
Conn.			146.7	144.8	103.1	221.5	224.5
N. J.			144.6	139.	108.	191.9	226.5

Diptheria

Tennessee	7.6	7.9	10.6	13.4	16.4	16.6	13.8
Mass.			14.5	15.	15.7	15.1	15.4
N. Y.			9.5	13.7	16.2	18.5	20.
R. I.			12.6	10.8	13.	21.2	20.
Pa.			15.6	16.7	22.3	19.8	21.4
Conn.			12.9	13.1	12.4	17.	18.9
N. J.			14.	18.2	18.5	17.8	18.5

Scarlet Fever

Tennessee	1.3	1.3	1.5	1.8	1.7	2.3	2.4
Mass.			4.	3.8	4.8	5.6	3.2
N. Y.			2.6	4.4	6.7	4.5	2.7
R. I.			1.6	1.6	2.3	4.4	2.5
Pa.			4.4	4.	7.3	5.7	2.8
Conn.			3.7	4.3	7.1	5.4	3.5
N. J.			2.8	3.7	7.3	4.5	2.5

Telephone and Telegraph Service -

The County is served by the Cumberland Telephone and Telegraph Company and the Western Union Telegraph Company. Until 1927 there were two telephone systems in operation, but they were unified at that time when the Cumberland system absorbed the Citizens Telephone Company. The service is adequate and efficient, long distance dispatches being handled promptly.

Institutions, Recreation, and Clubs

There is a well equipped hospital in Columbia for white people which is modern in every respect. There is an emergency hospital in Mt. Pleasant which is adequate in cases of emergency, but it is not equipped to handle ordinary cases. There is also a hospital for colored people in Columbia.

Churches and schools have been treated under separate heads.

The Kings Daughters have a community house in Mt. Pleasant from

and in which many civic duties are discharged.

The Greymere Country Club is situated about two miles from Columbia on the Jackson Highway between Mt. Pleasant and Columbia. It has a golf course, tennis courts, and it offers many social opportunities.

The Tennessee Orphan Home is located in Columbia, and each year it cares for many unfortunate children, placing them in good homes when possible.

Practically all of the leading fraternal orders are represented, and there are active chapters of the Rotary Club in Columbia and Mt. Pleasant. Both Columbia and Mt. Pleasant have well organized commercial clubs or Chambers of Commerce.

There are two social clubs in Columbia and one in Mt. Pleasant.

All of the major sports are participated in, and there is good hunting and fishing.

There are one daily paper and two weekly papers published in the county.

ECONOMIC COMPARISONS

(a) Comparison of Maury County with the Counties which Surround It.[25]

(b) Rank of Maury County and Social and Economic Comparison with First and Last Ranking Counties of the State.[26]

[25] Data taken from Economic and Social Study of Tennessee, by C. E. Allred, University of Tennessee Extension Series, Dec. 1924, and from 1920 Census Report for U. S.

[26] Ibid

COMPARISON OF MAURY COUNTY WITH THE COUNTIES WHICH SURROUND IT

General Economic

	Year	Maury	Hickman	Lewis	Lawrence	Giles	Marshall	Williamson
Size, area in square miles		618	570	286	611	628	378	586
Population per aquare mile	1920	60.8	28.4	20.0	38.6	49.3	46.0	39.9
Total white population per county	1920	23,453	14,288	5,021	22,611	21,516	14,284	16,863
Population of all incorporated places	1920	8,022	882	1,571	3,062	3,544	3,148	3,123
No. of Increase or Decrease in population	1910-20	-5,053	-311	-326	6,024	-1,681	503	-804
% Increase of decrease in population	1910-20	-12.5	-1.9	-5.4	34.3	-5.2	3.0	-3.3
% of population that is negro	1920	33.8	11.9	11.7	4.2	30.5	17.8	28.0
No. of negroes in the county	1920	11,950	1,928	668	982	9,431	3,089	6,546
Value of all farm property	1920	32,539,000	8,244,000	1,877,000	13,621,000	29,334,000	20,656,000	28,702,000
Net agricultural income (Receipts minus expenses)	1920	4,416,000	1,675,000	414,000	3,108,000	5,373,000	2,472,000	3,585,000
% of farms operated by tenants	1920	36.3	28.4	38.7	40.4	51.1	37.5	36.5
Number of tenants	1920	1,354	547	208	1,451	2,709	961	1,223
Total Banking resources (State and national banks combined)	1923	5,543,000	776,000	518,000	1,839,000	3,806,000	1,767,000	3,358,000
Assessed valuation of all property	1922	29,502,706	7,505,850	3,114,130	11,156,495	20,910,144	13,399,036	22,522,343
Wealth per square mile (assessed valuation per square mile)	1922	50,692	13,168	10,889	18,259	33,296	35,447	38,434
Value of all public utilities	1922	3,816,000	602,000	563,000	1,953,000	3,164,000	1,833,000	2,867,000

	Year	Maury	Hickman	Lewis	Lawrence	Giles	Marshall	Williamson
Percent of total assessed value of all property in public utilities	1922	12.9	8.0	18.7	17.5	15.1	13.6	12.7
Railroad mileage	1922	102	46	34	62	53	50	60
Assessed valuation of railroads	1922	3,138,000	537,000	525,000	1,883,000	2,834,000	1,584,000	2,337,000
Value added to products by manufacture	1920	1,116,000	210,000	230,000	345,000	148,000	448,000	239,000
Percentage of population urban	1920	15.6	0	0	0	9.0	15.6	13.3
No. of rooms in resort hotels	1924	0	70	0	6	32	0	0
No. resort hotels	1924	0	2	0	1	1	0	0
No. passenger automobiles	Jan.1 1924	2,288	661	279	914	1,372	1,096	1,607
No. personal income tax returns (all sizes)	1922	699	49	16	140	197	95	282
No. of personal income tax returns (over $5,000)	1922	45	1	0	1	8	6	15
Miles of public roads per square mile	1922	2.11	1.16	1.82	1.59	1.64	1.07	2.19
Miles of public roads per county	1922	1,230	660	520	970	1,030	406	1,284
No. of people to each practicing physician	1923	681	1158	951	1,026	688	869	762
Total county taxes collected	1922	248,000	99,000	43,000	132,000	208,000	87,000	151,000
Total state taxes collected	1923	106,000	27,000	11,000	40,000	75,000	48,000	81,000
County tax rate per $100	1923	.84	1.325	1.37	1.1875	.995	.64	.67
County tax rate for elementary schools	1923	.30	.3725	.46	.4075	.2225	.28	.225

	Year	Maury	Hickman	Lewis	Lawrence	Giles	Marshall	Williamson
% of county taxes going to elementary schools	1923	.36	.28	.34	.34	.22	.43	.34
Amount of taxes paid to state in excess of amount paid back by state for schools	1922	72,551	9,644	-3,933	16,649	44,207	28,614	60,930
Percent of native white illiterate	1920	4.1	8.7	11.5	7.5	5.9	3.4	6.5
Percent of negroes illiterate	1920	22.3	19.3	25.3	27.9	24.0	23.1	32.2
Average value of elementary rural school property per school	1923	3,151	982	599	1,840	1,153	2,298	2,072
Average value of elementary city school property per school	1923	37,600	43,500	----	----	29,950	----	30 ,774
Expenditures per pupil enrolled in rural elementary schools	1923	33.50	16.48	17.43	14.06	16.65	21.68	26.28
Excess of expenditure per rural H. S. pupil over rural elementary pupil	1923	41.25	86.81	53.61	31.33	49.71	40.38	37.07
% of rural elementary teachers having only elementary school training	1923	----	----	16.7	11.5	----	2.8	----
Percent of rural elementary teachers without previous experience	1923	9.2	8.7	10.4	17.2	11.7	17.6	12.5
Days taught per year in rural elementary schools	1923	160	128	116	116	136	156	153
Days taught per year in city elementary schools	1923	176	168	----	----	185	----	172

	Year	Maury	Hickman	Lewis	Lawrence	Giles	Marshall	Williamson
Average salary of rural teachers	1923	522	404	407	358	387	545	520
Average salary of city teachers	1923	713	953	----	----	1.143	----	472
% of all rural elementary schools having only one teacher	1923	59.3	76	92.1	59.5	67	56.6	76.4
No, of one-teacher rural schools in county	1923	57	60	35	56	73	30	67
% of enrollment in average daily attendance, white rural elementary schools	1923	66.2	61	67.3	55.7	58.5	70.9	61
No. of consolidated schools	1923	13	5	----	7	8	10	----
% of total enrollment enrolled in high schools	1923	5.3	4.4	6.3	4.3	5.8	4.1	5.8
No. of subscribers to 3 leading magazines	1924	1,224	207	102	276	618	487	664
Salary of County Superintendent	1923	2,150	2,500	1,500	2,800	2,300	2,020	2,200
% of schools not having libraries	1923	61	78	79	80	71	70	7
Total value of books in school libraries	1923	4,323	755	270	634	3,414	1.240	5.781

SUMMARY FOR MAURY COUNTY

Rank of This County			Amount for This County
19th	In land area in square miles		618
	Shelby is largest with	801	
	Trousdale is smallest with	106	
18th	In population per square mile		60.8
	Davidson is largest with	328.4	
	Van Buren is smallest with	9.0	
15th	In total white population - 1920		23,453
	Shelby is largest with	124,196	
	Van Buren is smallest with	2,574	
13th	In population of all incorporated places		8,022
	Shelby is largest with	165,417	
	Fentress, Grainger, Hancock, Perry, Union, Van Buren are smallest with	0	
94th	In percentage of increase in population - 1910-1920		-12.5
	Unicoi is largest with	40.5	
	Sequatchie is smallest with decrease of	13.6	
95th	In numerical increase in population - 1910-1920		-5,053
	Shelby is largest with	31,777	
	Maury is smallest with decrease of	5,053	
87th	In percentage of population that is Negro		33.8
	Unicoi is smallest with	0.04	
	Fayette is largest with	74.7	
87th	In number of Negroes		11,950
	Unicoi is smallest with	4	
	Shelby is largest with	98,962	
3rd	In value of all farm property		$32,539 ,000
	Shelby is largest with	$44,103,000	
	Van Buren is smallest with	977,000	
17th	In net agricultural income (receipts minus expenses)		$ 4,416,0 00
	Gibson is largest with	$7,817,000	
	Van Buren is smallest with	215,000	
52nd	In percentage of farms operated by tenants		36.3
	Morgan is smallest with	11.5	
	Lake is largest with	87.2	
70th	In number of farms operated by tenants		1354
	Sequatchie is smallest with	44	
	Shelby is largest with	7,387	
9th	In total banking resources (state and national banks combined)		$5,543,000
	Shelby is largest with	$113,767,000	
	Union is smallest with	66,000	
5th	In assessed valuation of all property		$29,502,706
	Shelby is largest with	$276,087,153	
	Pickett is smallest with	1,259,060	
10th	In wealth per square mile - (assessed valuation per square mile)		$50,692
	Davidson is largest with	$388,597	
	Wayne is smallest with	5,489	

11th	In value of all public utilities - 1922		$3,816,000
	Shelby is largest with	$46,567,000	
	Hancock is smallest with	0	
47th	In percent of total assessed value of all property in public utilities		12.9
	Morgan is largest with	44.8	
	Hancock is smallest with	0	
6th	In railroad mileage		102
	Shelby is largest with	231	
	Cannon, Clay, DeKalb, Perry, Pickett, Van Buren, Jackson, Hardin, Meigs, Macon, Moore, Hancock are smallest with	0	
12th	In assessed valuation of railroads		$3,128,000
	Shelby is largest with	$20,419,000	
	Cannon, Clay, DeKalb, Perry, Pickett, Van Buren, Hardin, Jackson, Meigs, Macon, Moore, Hancock are smallest with	0	
22nd	In value added by manufacturing		$1,116,000
	Shelby is largest with	$50,102,692	
	Hancock is smallest with decrease of	245	
22nd	In percentage of population urban		15.6
	Shelby is largest with	72.7	
	56 counties smallest with	0	
14th	In urban population		5,526
	Shelby is largest with	162,351	
	56 counties are tied for smallest with	0	
Small-est	In number of rooms in resort hotels		0
	Macon is largest with	301	
	65 counties are tied for smallest with	0	
10th	In number os passenger automobiles		2,288
	Shelby is largest with	26,431	
	Van Buren is smallest with	10	
8th	In total number of income tax returns (all sizes)		699
	Shelby is largest with	17,537	
	Union is smallest with	1	
10th	In number of income tax returns over $5,000 - 1922		45
	Shelby is largest with	1,825	
	Sevier, Benton, Houston, Lewis, Perry, Decatur, Jakcson, Moore, Sequatchie, Clay, Bledsoe, Hancock, Meigs, Van Buren, Union, Pickett are smallest with	0	
9th	In number of farms of average size per practicing physician		91
	Davidson is smallest with	12	
	Hancock is largest with	1,029	
85th	In number of people to each practicing physician - 1923		681
	Davidson is smallest with	448	
	Hancock is largest with	5,227	
12th	In number of miles of public road per square miles - 1922		211
	Moore is largest with	4.25	
	Sequatchie is smallest with	.40	
13th	In number of miles public road per county - 1922		1,230
	Carroll is largest with	1,500	
	Trousdale is smallest with	60	
9th	In amount of total county tax collected		$248,000
	Shelby is largest with	$2,568,000	
	Pickett is smallest with	13,000	

5th	In amount of total state taxes collected - 1923		$106,000
	Shelby is largest with	$994,000	
	Pickett is smallest with	5,000	
16th	In county tax rate for all purposes per $100 - 1923		$.84
	Wilson is smallest with	$0.64	
	Scott is largest with	2.20	
85th	In county tax rate for elementary schools - 1923		.30
	Hardin is largest with	.6525	
	Obion is smallest with	.1925	
6th	In amount of taxes paid to state in excess of amount paid back by the state for schools - 1922		$72,551
	Shelby is largest with	$836,106	
	Overton is smallest with	7,827	
9th	In percentage of native white illiteracy - 1920		4.1
	Shelby is smallest with	.07	
	Macon is largest with	22.0	
38th	In percentage of Negroes illiterate - 1920		22.3
	Perry is the smallest with	9.8	
	Pickett is largest with	100.0	
10th	In average value of rural elementary school property (per school)		$3,151
	Hamilton is largest with	$12,154	
	Overton is smallest with	333	
12th	In average value of city elementary school property (per school)		$37,600
	Hamilton is largest with	$149,246	
	Macon and Wayne tied for smallest with	1,000	
11th	In expenditure per pupil enrolled for rural elementary schools		$33.50
	Davidson is largest with	$76.51	
	Union is smallest with	10.73	
54th	In excess of expenditure per rural high school pupil over rural elementary pupil		$41.25
	Shelby is largest with	$426.91	
	Weakley is smallest with	00.30	
12th	In percentage of rural elementary teachers having only elementary training		0
	28 counties tied for smallest with	0	
	Benton is largest with	46.1	
8th	In percentage of rural elementary teachers without previous experience		9.2
	Shelby is smallest with	5.3	
	Lake is largest with	39.1	
10th	In length of rural elementary school terms		160
	Lincoln is largest with	175	
	Overton is smallest with	91	
26th	In length of city elementary schools terms		176
	Knox is largest with	187	
	Overton is smallest with	99	
21st	In average annual salary for rural teachers		$522
	Hamilton is largest with	$896	
	McNairy is smallest with	295	
	In average annual salary of city teachers		$713
	Montgomery is largest with	$1,377	
	Cumberland is smallest with	368	

34th	In percentage of rural elementary schools having only one teacher		59.3
	Shelby is smallest with	16.2	
	Pickett is largest with	96.6	
35th	In number of one-teacher rural schools		57
	Sequatchie is smallest with	4	
	Hardeman is largest with	86	
36th	In percentage of enrollment in average daily attendance in white rural elementary schools		66.2
	Marion is largest with (reported)	100	
	Blount is smallest with	34.5	
21st	In percentage of enrollment in average daily attendance in all schools		70
	Marion is largest with (reported)	99	
	Lake is smallest with	50	
12th	In number of consolidated schools		13
	Greene is largest with	35	
	16 counties tied for smallest with	0	
54th	In percentage high school enrollment is of total enrollment		5.3
	Van Buren is largest with	14.6	
	Hancock is smallest with	1.4	
9th	In number of subscribers to three leading magazines		1224
	Davidson is largest with	10,094	
	Pickett is smallest with	5	
9th	In percent of total number of subscribers to three leading magazines (100% equals all in state)		1.93
	Davidson is largest with	15.90	
	Union, Van Buren, Pickett tied for smallest with	.01	
33rd	In salary of county superintendent		$2,150
	Hamilton is largest with	$4,350	
	Sequatchie and Perry tied for smallest with	500	
Small	In clerical help from rural elementary funds		0
	Shelby is largest with	$2,633.99	
	64 counties tied for smallest with	0	
33rd-	In percent of rural schools not having libraries		61
	Bradley is smallest with	7	
	Bledsoe and Stewart tied for largest with	95	
7th	In total value of books in all rural school libraries (elementary and high)		$4,323
	Hamilton is largest with	$18,940	
	Van Buren is smallest with	2.36	

TOWNS

Columbia

"Columbia, the county seat had a population of 5,526 in 1920. (The corporate limits have since been increased and the population is now estimated at 10,500.) It is located near the center of the county, about 45 miles from Nashville."[27]

The city form of government is of the mayor, city judge, and aldermen type.

Two public schools, one county school, one girls preparatory school, and one boys preparatory school are located here.

There are sixteen white churches and fourteen colored churches with practically every denomination represented in this city.

"Columbia is the principle mule market of this and adjoining counties. The monthly sales, probably the largest in the country, are attended by buyers from the Cotton Belt, local dealers, and often Government buyers. There are several large elevators and rolling mills at Columbia, and a number of well equipped produce houses afford a good market for poultry and eggs. The Middle Tennessee Experiment Station farm is situated about two miles west of Columbia." [28]

The principle streets are hard surfaced and all of the streets in the corporate limits are in good repair.

"Columbia is supplied with water by the Tennessee Water Company. The water is drawn from the Duck River. The facilities of the Tennessee Water Department are such that they can put out between one and two million gallons per day, having acceptable bacteriological and chemical content. Two 100 H. P. motors that have a 700 gallon per minute capacity are used."[29]

[27]Soil Survey of Maury County
[28]Ibid
[29]Southern Cities Power Co., Industrial Report of Columbia

A report of the total resources and deposits of each of the banks of Columbia, July 1926, are as follows:

	Total Resources	Total Deposits
Phoenix National Bank	$1,084,268,28	$484,181.06
Phoenix Saving Bank and Trust Co.	342,038.01	288,950.85
Columbia Bank and Trust Co.	716,874.00	599,308.61
Maury National Bank	1,747,906.64	1269,330.12

Available Sites

Sites can be found along the main line of the L. and N. or the N. C. and St. L. Railroad or on the Duck River. Spur tracks and sidings can be had cheaply in this district as the county is level.

Housing Conditions

Housing conditions in Columbia are very good and an ample supply of houses is to be found.

"Rent and Board - Modern up-to-date homes rent from $40.00 to $50.00 per month while smaller houses can be secured for $18.00 to $25.00 per month. ..... Housing facilities for negro labor can be obtained for $12.00 to $20.00 per month. Rooms and board of the best class can be secured for $30.00 to $40.00 per month.

"The combined city, county, and state tax of Columbia for the year 1925 was $2.96 per $100.00 of assessed valuation. The county and state tax for 1925 was $1.56 per $100.00 assessed valuation. Taxes for schools roads, sinking fund, and bridge building are included in the above."[30]

The post receipts at Columbia for the years from 1921 to 1925 are as follows:

1921 - $33,825.44 1922 - $33,752.01

1923 - 36,284.34 1924 - 36,621.33

1925 - $37,543.43

The King's Daughters Hospital and the Tennessee Orphans Home are

[30]Southern Cities Power Co., Industrial Report of Columbia

located in Columbia.

Recreation and fraternal opportunities are plentiful.

Mount Pleasant

Mount Pleasant is located on the Nashville Florence and Sheffield division of the Louisville and Nashville Railroad, about 12 miles southwest of Columbia. It had a population of 2,093 in 1920.

The city form of government is of the mayor, city judge, and aldermen type.

The public school for white children is a county and city school. There is also a very modernly equipped school for colored children.

There are six churches for white people and five churches for colored people in Mt. Pleasant.

Mt. Pleasant is the center of the phosphate industry in Tennessee, and there are several associated industries which include three machine shops, two fertilizer plants, and two commercial chemical laboratories. Mt. Pleasant is a shipping center not only for the products of the phosphate field but for live stock also.

Some of the streets of Mt. Pleasant are hard surfaced and all of those within the corporate limits are in good repair.

Mt. Pleasant is furnished water by a municipally owned system. The spring which is located about twelve miles from the city furnishes free-stone water which is forced into the city directly from the spring by gravity and at a pressure of 95 pounds. At the present time there is no reserve supply of water for industrial purposes in case of an extreme drought, but should the need arise, the supply could be doubled.

Available sites may be found along the main line of the L. and N. or along the many branch lines which lead to the numerous phosphate mines in the vicinity.

Housing conditions in Mt. Pleasant are good and there is a fair supply of them. Practically the same renting and boarding conditions exist in Mt. Pleasant as are shown for Columbia.

The city tax rate is $1.50 on $100.00 assessment.

The Chamber of Commerce of Mt. Pleasant will arrange, under certain conditions, to care for the city taxes for a period of five years.

CONCLUSIONS

The history of the people of Maury County seems to indicate that a conservative type of people of lofty ideals should be found there, and this is true. It was not until recently that these people who were absorbed in agriculture began to take an active interest in the affairs of industrial life, and even at the present time it appears that their interest seems to lie in getting some one else to invest capital and develop industries in their midst rather than in doing this themselves.

The commercial clubs of Columbia and Mt. Pleasant have, and are, doing good work in their effort to locate industries in the county, and it is hoped that their efforts shall be sustained and fruitful but that their zeal shall not lead them to make investments in foreign industries in an effort to cause them to locate in their midst when these industries are not economically justified or when their purpose is to make fraud possible. This type of fraud is a constant menace to commercial club work, and it has been repeatedly and successfully worked.

The five factors which determine the location of any industry are:

1. Men, - the physical qualities and social and religious ideals.
2. Material, - natural and derived resources.
3. Market, - domestic and foreign.
4. Money
5. Transportation.

Each and all of these factors must be given due regard before the establishment of an industry is economically justified.

The scope of the information in the body of this survey does not cover all of the factors for even one industry, but the material which is present does justify the singling out of specific industries for complete

investigation, namely:

The manufacture of chewing and smoking tobacco and insecticides from tobacco.

The manufacture of lime and crushed limestone products.

The manufacture of small hardwood furniture and stoves.

The manufacture of barn paints through the use of iron oxide.

Orcharding, particularly apples and cherries.

The canning of fruits and vegetables.

The manufacture of special feeds for dairy cattle and chickens.

The manufacture of textile goods.

The manufacture of Portland Cement.

The production of dairy and creamery products.

The canning of pork and beef products.

The packing of pork products, especially of cured hams for fancy market purposes.

The manufacture of chemical products.

The manufacture of iron and steel by electric furnace process, but this is dependent upon a cheaper supply of electric power which is probable upon the development of the water power resources of the state.

APPROVAL

The foregoing thesis is hereby approved as a creditable study of an engineering subject, carried out and presented in a manner sufficiently satisfactory to warrant its acceptance as a prerequisite to the degree for which it has been submitted. It is to be understood that by this approval the undersigned does not necessarily endorse or approve any statement made, opinions expressed, or conclusions drawn therein, but approves the thesis only for the purpose for which it is submitted.

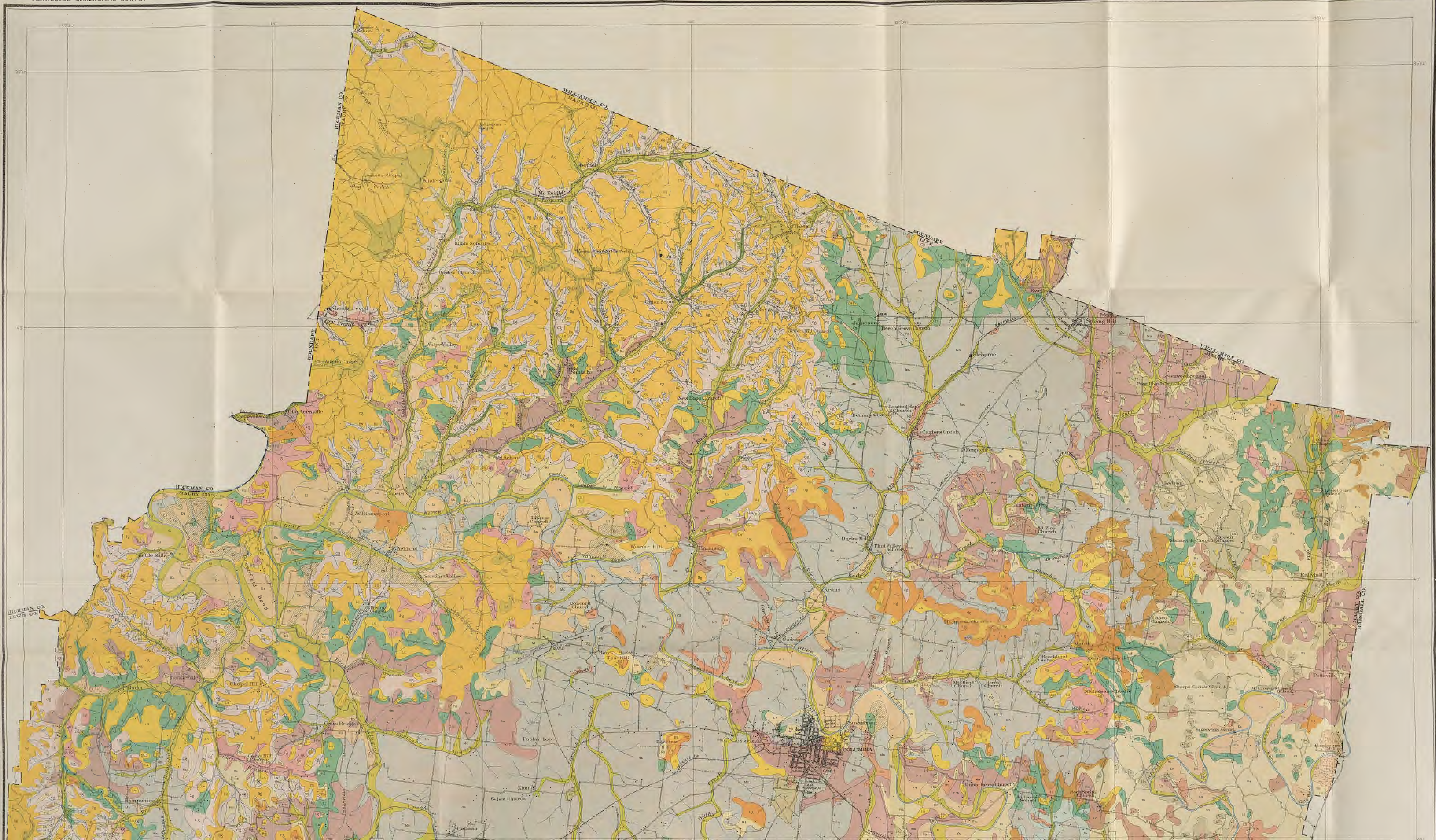
Name W. R. Woolrich

Title Prof. Mech. Eng.

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF SOILS
IN COOPERATION WITH THE
TENNESSEE GEOLOGICAL SURVEY

SOIL MAP

TENNESSEE
MAURY COUNTY SHEET



LEGEND

Baxter gravelly loam (Bg)	Hagerstown stony loam (Hs)
Baxter silt loam (Bl)	Hagerstown gravelly loam (Hg)
Clarksville gravelly loam (Cg)	Hagerstown silt loam (Hm)
Culleoka very fine sandy loam (Cv)	Hagerstown clay loam (Hc)
Culleoka loam	Lowell stony clay (Ls)
Dickson silt loam (Dl)	Lowell gravelly loam (Lg)
Elk silt loam (Es)	Lowell silt loam (Ll)
Rolling phase	Lowell clay loam (Lc)
Huntington gravelly loam (Hy)	Maury silt loam (Ms)
Huntington silt loam (Hl)	Rough stony land (Rs)
Mine Pit and Mine Dump (M)	

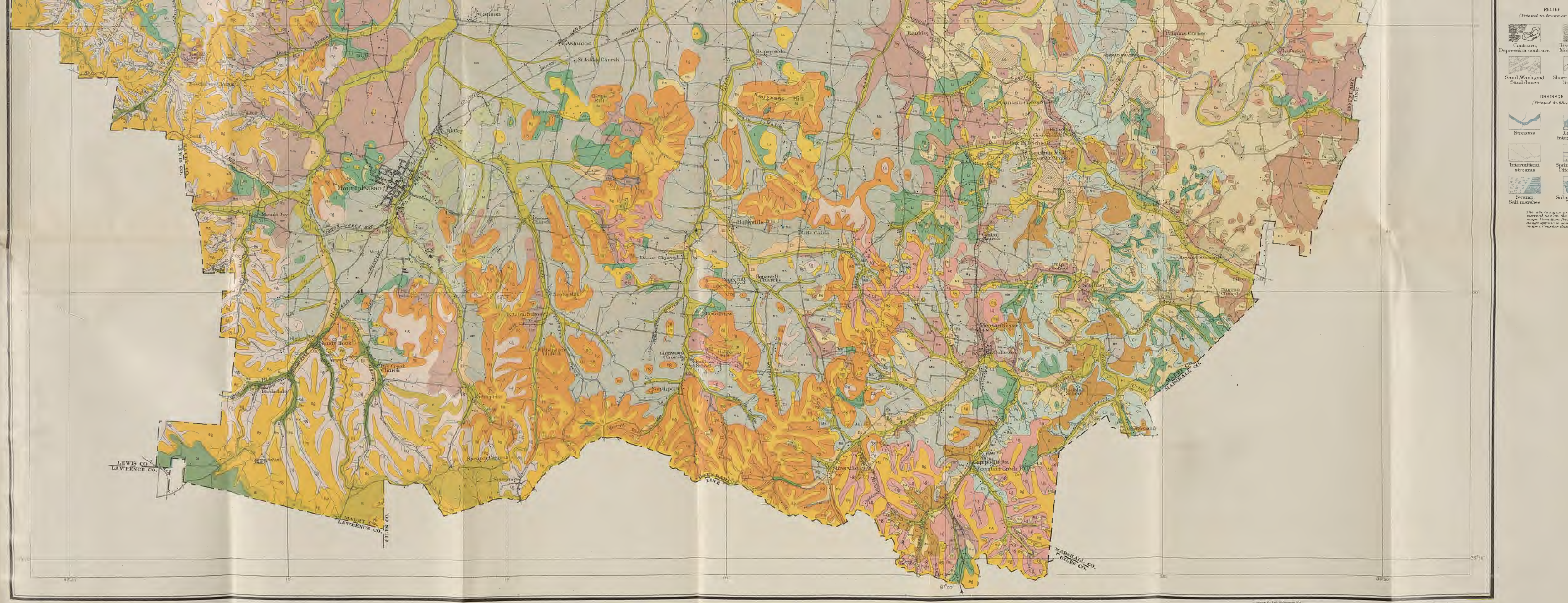
CONVENTIONAL SIGNS

CULTURE
(Printed in black)

City or Village, Roads, Buildings, Wharves, Jetties, Breakwater, Levee, Lighthouse, Fort.

Secondary roads and Trails	Railroads, Steam and Electric (Double track, Single track, Juxtaposition, In road)
Bridges, Ferry	R.R. crossings, Tunnel (R.R. above, R.R. below)
Ford, Dam	School or Church, Cemeteries (CEM)
Mine or Quarry, Mine dumps, Made land	Bluff, Escarpment, Rock outcrop and Triangulation station
Stony and Gravelly areas	Soil boundaries
Boundary lines (State, County)	Boundary lines (Land grant, City or village)
Boundary lines (Civil township, Reservation)	U.S. township and section lines

RELIEF
(Printed in brown or black)



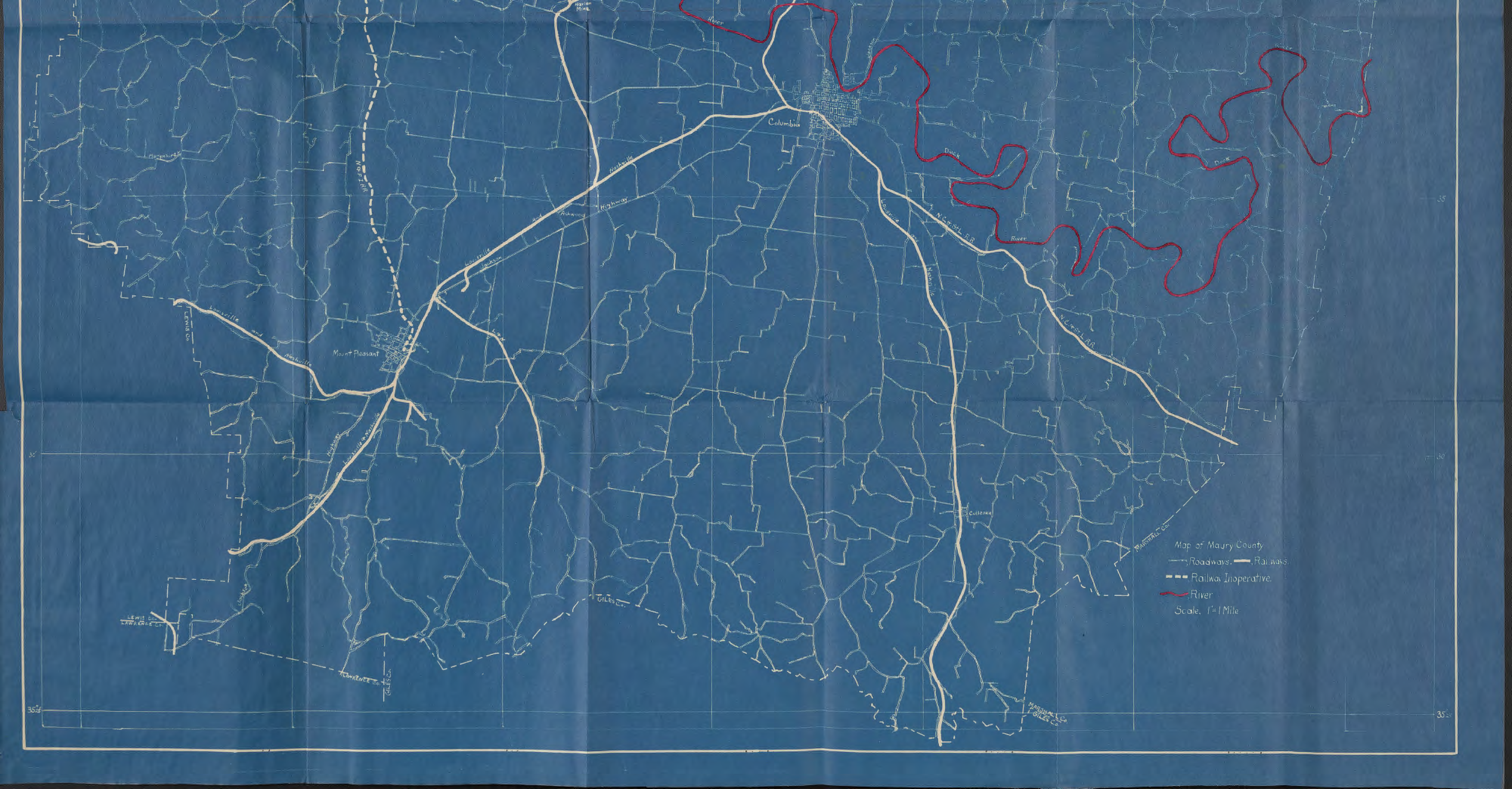
Soils surveyed by J. H. Agee, in charge, and J. A. Kerr.

1 ½ 0 1 2 3 4 Miles

Scale 1 inch-1 mile

Field Operations
Bureau of Soils
1923

87°20'
15'
10'
5'
55'
35°50'
45'
40'
HICKMAN Co.
Leatherwood
Spring Hill
Nashville
Louisville
HICKMAN Co.
Williamsport
River
Duck
Franklin
R.R.


Map of Maury County
Roadways.
Railways.
Railway Inoperative.
River
Scale, 1"=1 Mile
Columbia
Mount Pleasant
Culleoka
Duck
River
N.C.& St.L. R.R.
Louisville
and
Nashville
Highway
Ashwood
N.&F. R.R.
Lewis Co.
Lawrence Co.
Giles Co.
Marshall Co.
35°
30'

STATE OF TENNESSEE
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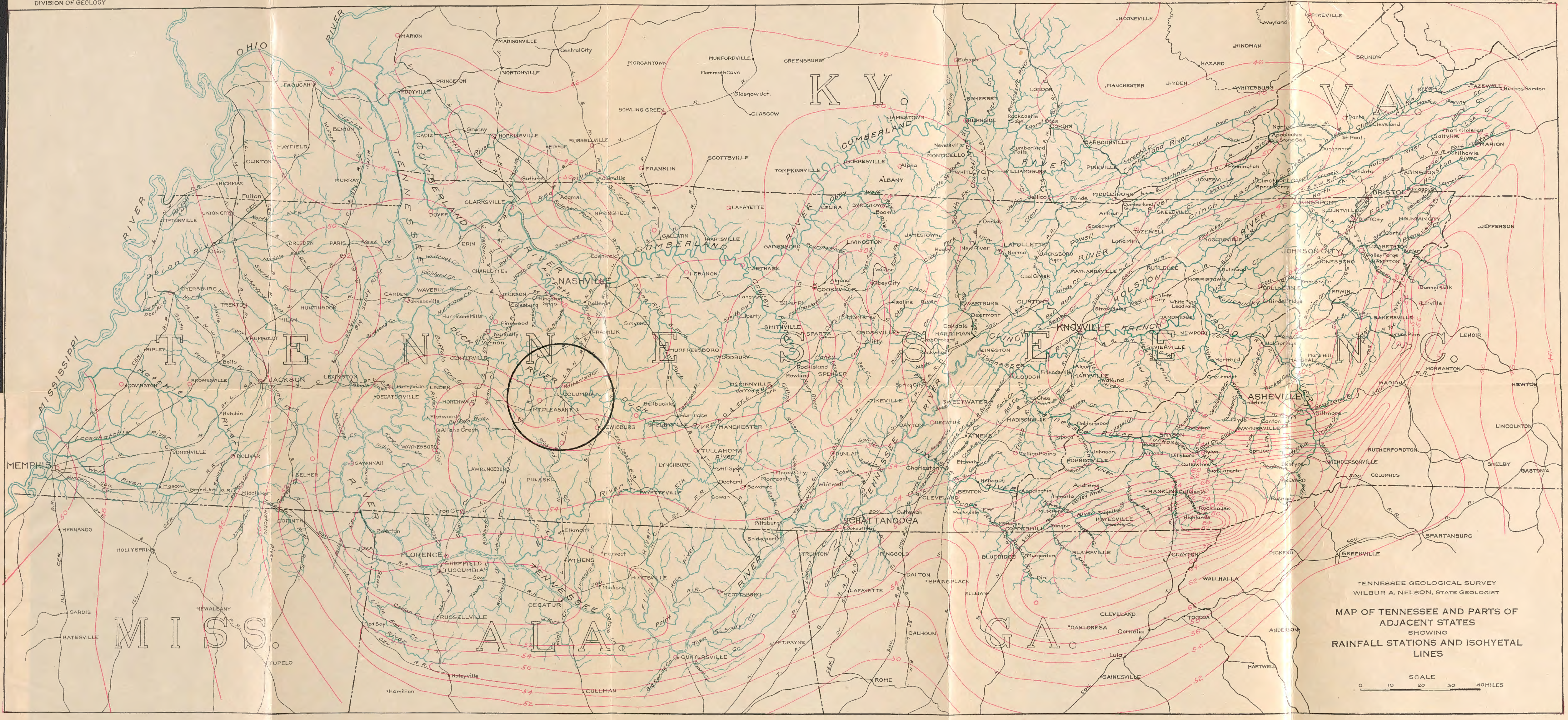
DIVISION OF GEOLOGY

BULLETIN 34 PLATE 1-B



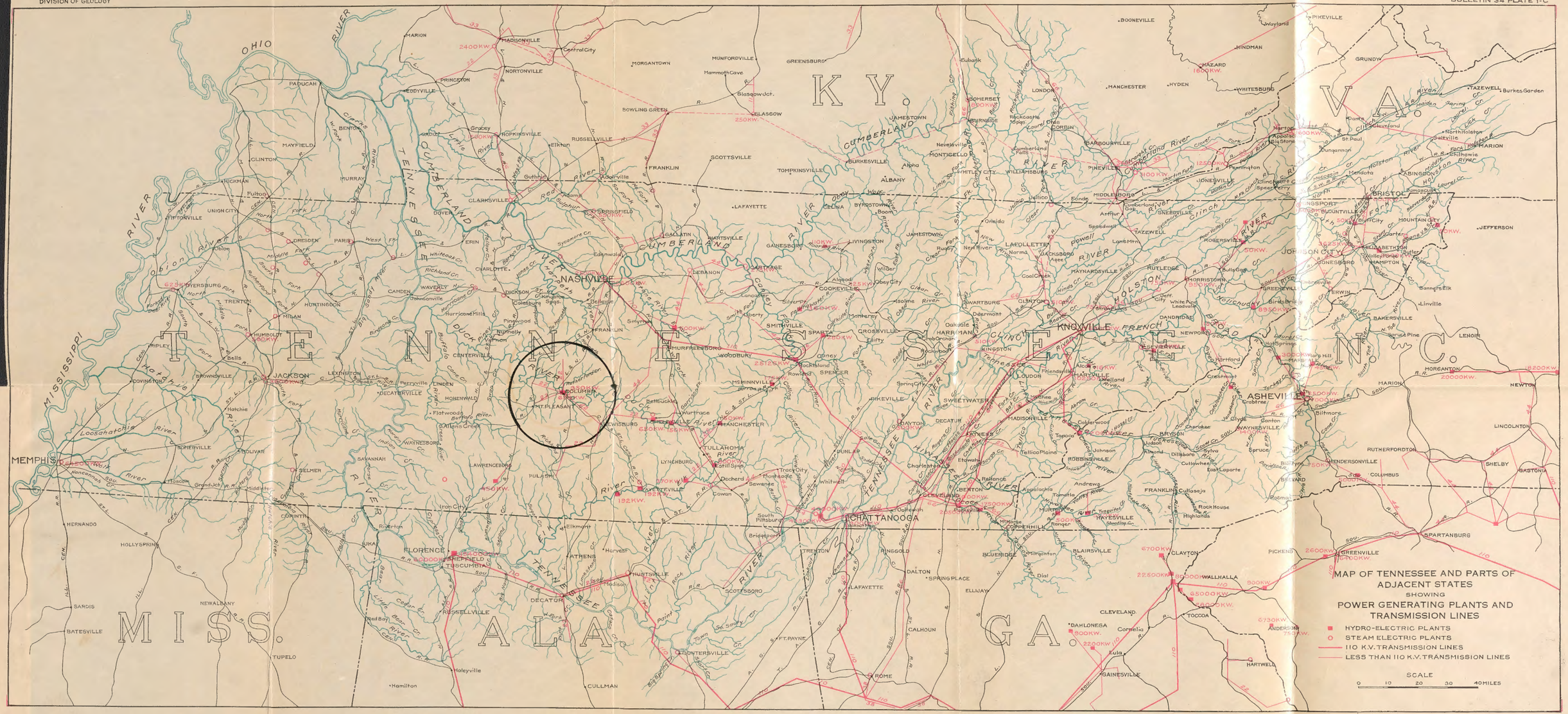
TENNESSEE GEOLOGICAL SURVEY
WILBUR A. NELSON, STATE GEOLOGIST

MAP OF TENNESSEE AND PARTS OF ADJACENT STATES
SHOWING
RAINFALL STATIONS AND ISOHYETAL LINES

SCALE
0 10 20 30 40 MILES

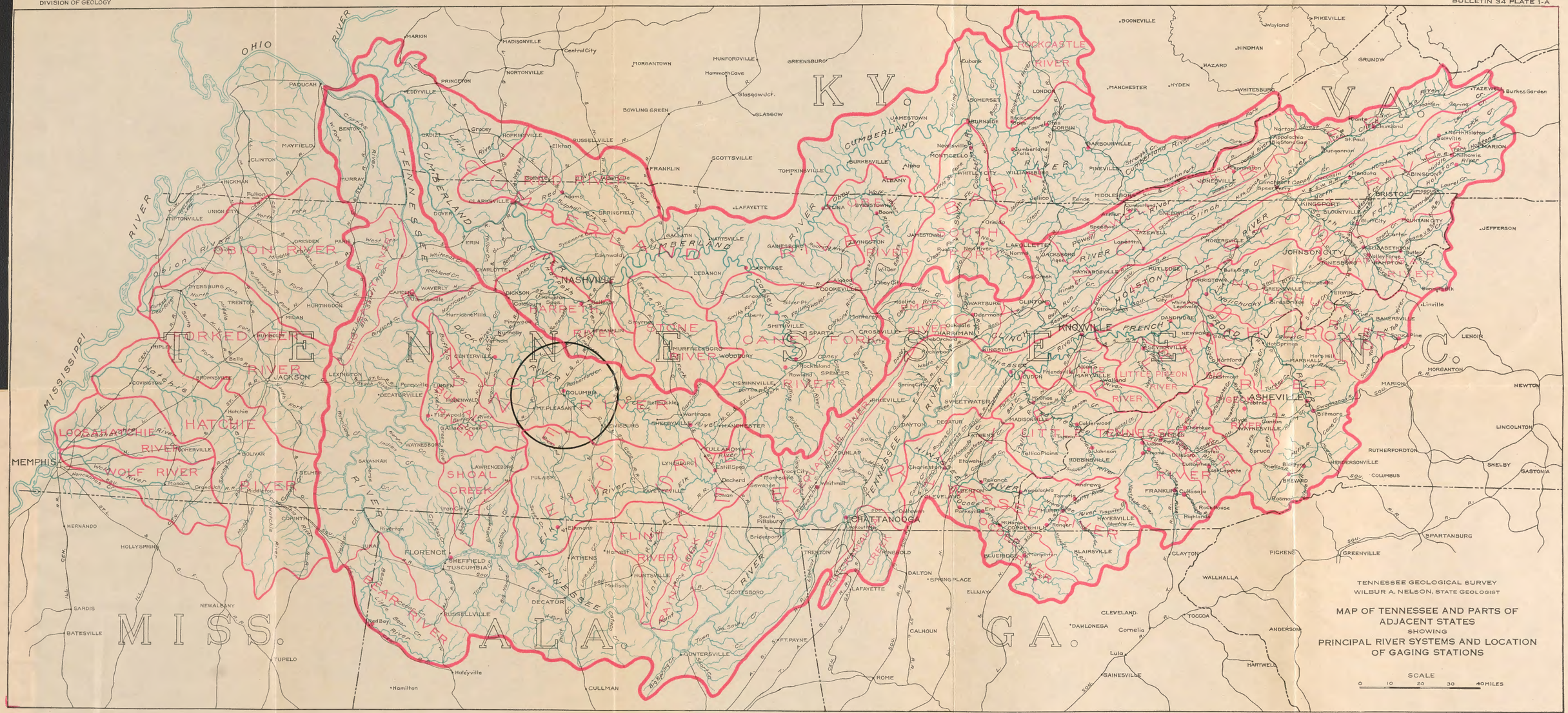
STATE OF TENNESSEE
DEPARTMENT OF EDUCATION
DIVISION OF GEOLOGY

BULLETIN 34 PLATE 1-C



STATE OF TENNESSEE
DEPARTMENT OF EDUCATION
DIVISION OF GEOLOGY

BULLETIN 34 PLATE 1-A



TENNESSEE GEOLOGICAL SURVEY
WILBUR A. NELSON, State Geologist

MAP OF TENNESSEE AND PARTS OF ADJACENT STATES
SHOWING
PRINCIPAL RIVER SYSTEMS AND LOCATION OF GAGING STATIONS

SCALE
0 10 20 30 40 MILES

Columbia, Tenn.
Street System, 1927.
5" = 1 mile

Mt. Pleasant, Tenn.

Street System, 1927.

5" = 1 mile