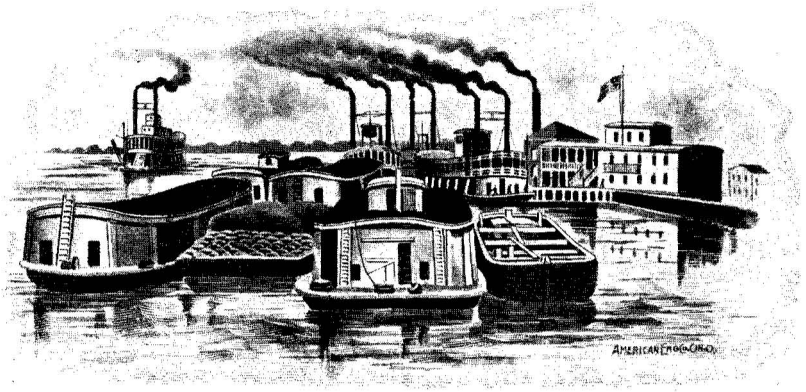
...MEMORIAL...

OF THE

Coosa River Improvement Convention



ASSEMBLED AT

GADSDEN, ALABAMA,

SEPTEMBER 27, 1899.

ROBERTS PRINTER, B'HAM.

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TO MEMORIALIZE THE CONGRESS OF THE UNITED STATES OF AMERICA, ASKING AN APPROPRIATION OF A SUFFICIENT SUM OF MONEY TO REMOVE THE OBSTRUCTIONS WHICH INTERCEPT THE NAVIGATION OF THE COOSA RIVER

MEMORIAL.

To the Honorable Senate and House of Representatives of the United States in Congress Assembled:

Your Memorialists, who met in convention at Gadsden, Alabama, on September the 27th, A. D., 1899, with the Honorable D. B. Hamilton, of Rome, Georgia, presiding, respectfully recommend and ask that the improvement of the Coosa river in Alabama and Georgia, now progressing under the auspices of the War Department of the United States, be placed on the CONTINUOUS CONTRACT PLAN, and that $1,000,000 per annum be appropriated by Congress to be used in opening this important stream to through navigation to the Gulf of Mexico; and we beg to submit the following facts and evidences in support of this Memorial, to-wit:

HISTORIC NAME OF THE COOSA RIVER.

The following remarks are taken from the report of Maj. D. M. Andrews, Assistant Engineer in charge.

The name Coosa has been variously given as meaning big or great water, and beautiful. The Bureau of Ethnology of the Smithsonian Institute gives it as being probably derived from the Choctaw word "Coosha" meaning "reedy." The following derivation of the name is gathered from Pickett's History of Alabama: "De Soto in his wanderings in Alabama found a powerful tribe of Indians living along the river banks, who, according to traditions among the Muscogees, were conquered by that tribe at the end of the migration from Mexico, and amalga-

mated with it. The language of the Coosas perished and their name alone survives in that of the river."

De Soto discovered the river in 1540, and marched down its entire length. After his discovery the region through which it passes remained undisturbed except by the tribal wars of the Indians for nearly a century and a half. In 1813 and 1814 it became the scene of General Jackson's campaign against the Creek Indians, which practically terminated with the battle of Horseshoe, upon the Tallapoosa river March 27, 1814.

MAGNITUDE OF THE RIVER.

The Coosa river rises in the mountains of North Georgia, and flows southwesterly and southerly until it helps to form the Alabama river a few miles below Wetumpka, Alabama.

It is formed by a junction of the Oostanaula and Etowah rivers, at Rome, Georgia. From the most northerly navigable point the distance along these streams to the Gulf of Mexico is as follows:

Oostanaula river	108	miles
Coosa "	315	"
Alabama "	390	"
Mobile "	50	"
Total	863	"

There would be a continuous water route of transportation over the bosom of these rivers to the Gulf, but for the shoals and rapids on the Coosa river, distributed over a distance of only one hundred and forty-two miles from Greensport to Wetumpka, Alabama, and these shoals and rapids are intermingled with long pools of deep water. However, of this distance there has been opened to navigation by the government improvement of the river about 35 or 40 miles from Greensport down to Lock Four, Alabama.

The Coosa river is not one of those insignificant streams upon which often large sums of money are spent with no avail, but to the contrary, it is a deep, bold running and beautiful stream,

its grandeur and beauty is excelled by none, with sufficient water for successful low water navigation for boats drawing four feet of water or over, if the water was properly concentrated over the shoals and rapids between Lock Four and Wetumpka, Alabama.

To give a more correct idea of the magnitude of the river and its possibilities, we quote from the report of Charles Frith, United States Assistant Engineer, in his report of November 24, 1888, in which he says: Velocity observations taken at Lock Four show a discharge of 3,921 cubic feet, with a velocity of 1.33 feet per second, at a stage of 1.8 feet above low water. Similar observations at Wetumpka, at low water, show a discharge of 5,796 cubic feet, with a velocity of 0.9 feet per second.

In the annual report of the Chief of Engineers for 1879, page 1203, the low water discharge of the Mississippi river at St. Paul is given at 5,800 cubic feet per second. In the report for 1880, page 482, the low water discharge of the Hudson river between Troy and Albany is given as about 2,000 cubic feet per second; and in the report for 1881, page 1929, the low water discharge of the Ohio river at Pittsburgh is given as 1,666 cubic feet at zero of the gauge, and as 5,810 cubic feet per second at 9 inches of the gauge.

Comparing these discharges with that of the Coosa at Wetumpka, it appears that the volume of water flowing in the Coosa at low water is about equal to that of the Mississippi at St. Paul; about 2.8 times greater than that in the Hudson at Albany; and about 3.5 times greater than that in the Ohio at Pittsburgh.

INTRODUCTION OF THE PROJECT.

Prior to 1823 the Legislature of Alabama passed a bill to improve the navigation of the Coosa river and to aid in its connection with the Tennessee waters. In 1824 this act was formally approved by Congress. In 1828 Congress provided that any surplus of the grant for improving the Tennessee river should be applied to the improvement of the Coosa, Cahaba and Black Warrior rivers.

The original project for the improvement of the Coosa river contemplated the opening of a continuous water route of transportation from the Mississippi river to the Atlantic ocean, by way of the Ohio, Tennessee, Coosa, Etowah, Ocmulgee and Altamaha rivers, with canals from the Tennessee to the Coosa and from the Etowah to the Ocmulgee. This was designated as the southern route.

In the early settlement of Alabama, flat-boating was carried on quite extensively from points along the upper Coosa to Mobile, Alabama, transporting a variety of agricultural products to the Mobile market. Steam navigation was begun on the upper Coosa about fifty years ago, since which time that portion of the river has been continuously and successfully navigated by steam vessels between Rome, Georgia, and Greensport, Alabama, a distance of about 175 miles, and this distance has recently been increased about 40 miles by the opening of the river to Lock Four. On this portion of the river, however, there is a small amount of channel work on the Alligator shoals to be done, necessary to the successful low water navigation between Lock Three and Four, and we ask that this piece of work have the prompt attention that the necessities of the situation demand, which the worthy engineers in charge will gladly do if they are only furnished with the necessary money.

GEOLOGICAL FORMATION.

The source of the Coosa river is in the mountains of North Georgia which is a part of the great Appalachian chain of mountains running almost across the continent of North America from northeast to southwest. Where the flow of the river is southwest in course with the Appalachian chain, we find deep water, but below Gadsden, Alabama, the river deflects to the south, cutting diagonally across the strata of faulted rocks so characteristic with this chain of mountains and dependencies, and the alternate shoals, rapids and pools of deep water that characterize this portion of the Coosa, is attributable to the different ledges of rock it crosses in its southern course. The meander-

ings of the river as it flows southwest crossing the valley from side to side through fertile fields of agriculture intermingled with rich mineral and timber deposits, make it accessible to almost every formation and portion of the valley, and the fact that this portion of the country is the southwestern extremity of the great Appalachian chain accounts for the presence of so large a number of valuable minerals in the Coosa valley and is a geological sequence.

THE COOSA VALLEY.

The drainage area of the Coosa basin above Wetumpka, including its tributaries, is about 6,850 square miles, which is rich in agriculture, forests and minerals.

The climate of the valley is salubrious, mild and temperate, the springs are early and wonderfully balmy, the summers are long and even in temperature, the autumns are late and dry, and the winters are so slow of approach and so mild that some portions of the crops are frequently left out in the fields until after Christmas.

GEORGIA.

That part of the valley lying in Georgia is bounded on the northwest by the Lookout Mountain, on the southeast by the line of hills or mountains embracing the gold belt of Georgia. This region is traversed by the waters of the Coosawattee, Connosawga, Oostanaula, Etowah,and Chattooga rivers and Big Cedar creek and their tributaries, all of whose waters help to form the Coosa.

These river basins and mountain sides are densely timbered with hard woods. The white oak region of the Chattanooga range covers about 500 square miles and still possesses the greater portion of its virgin forests. This region embraces a population of about 225,000, and covers an area of about 6,000

square miles of productive soil and unsurpassed mineral resources.

They produce about 50,000 bales of cotton, 4,500,000 bushels of corn, 1,500,000 bushels of oats, 1,700,000 bushels of wheat, and other farm products in proportion.

ALABAMA.

AGRICULTURAL RESOURCES.

There are nine counties in Alabama lying immediately upon the Coosa river and cut off from all water communication with the Alabama river, to wit: Cherokee, Etowah, Calhoun, St. Clair, Talladega, Shelby, Coosa, Chilton and Elmore. The area of these counties lying immediately upon the Coosa is about 3,566,272 acres, of which there is probably 632,855 acres in a high state of cultivation. These lands are wonderfully fertile and easy to cultivate. The most diversified farming is carried on in every part of the Coosa valley and with the most gratifying success. Cotton, corn, oats, rye, sugar-corn and potatoes are the principal crops, though almost every vegetable that grows in the temperate zone is produced here; they thrive almost the year around. Fruits grow to perfection, especially apples, peaches, pears and grapes. The soil and climate seem peculiarly suitable to grape culture. Indeed fruits of every variety flourish in these soils. Strawberries, raspberries, figs and melons will inevitably yield in proportion to the attention bestowed upon them.

STOCK RAISING.

One of the coming industries of this part of the country is stock raising, as the greatest inducements to this pursuit exist in abundance. Luxuriant grasses and wild clover grow spontaneously and when cultivated they are quite fine. Cane also flourish and grow in great abundance along the banks of the rivers and small streams, which make a very fine winter food for stock, and they thrive in the cane-brakes the winter through with but little if any other food. These considerations, taken in

connection with the prevalence of perpetual gushing springs and streams, makes the Coosa valley a most desirable section for this branch of industry now assuming such proportions in the South.

DAIRY AND POULTRY FARMING.

These branches of industry offer great inducements and yield enormously when properly managed, the extent and possibilities of these branches of husbandry is almost beyond the conception of man, unless it is those familiar with their culture; though in the absence of statistical facts touching on this subject we refrain from going into the details of this industry, hence it will be left out of the compilation.

POPULATION AND PRODUCTION.

The population of these nine counties is about 200,000 souls. The assessed value of their property is over forty-five millions of dollars. They have in cultivation nearly 700,000 acres of land. They produce annually about 150,000 bales of cotton, 3,500,000 bushels of corn, 750,000 bushels of oats, 500,000 bushels of wheat, and other farm products, including stock, in proportion.

TONNAGE.

The combined tonnage of agricultural products grown annually in that portion of Georgia and Alabama lying immediately on the Coosa river is as follows:

Cotton	50,000	tons
Cotton Seed	100,000	"
Corn	224,000	"
Oats	40,500	"
Wheat	67,500	"
Cattle, Sheep and Hogs	20,000	"
Total annual tonnage	502,000	tons

The value of which may be safely put at sixteen millions of dollars per annum, to say nothing of the miscellaneous agricultural products and the thousands of head of horses and mules shipped annually from the Coosa valley.

TIMBERED RESOURCES.

There are 2,835,000 acres of unimproved lands lying in the nine counties immediately upon the Coosa river in Alabama.

These lands are clothed with virgin forests of long leaf yellow pine, intermingled with white, red and chestnut oak, hickory and many other varieties of valuable timbers. These forests contain not less than 3,000 feet of timber per acre, making a grand total of 8,505,000,000 feet, or a tonnage of about twenty millions of tons, the value of which may be placed at $65,000,000.

Cutting timber from this great forest at the rate of 80,000,000 feet per annum it would take over a hundred years to denude this forest of its virgin timber, and shipping at this rate would give a tonnage of 150,000 tons per annum, from this source alone, whose value would be $5,600,000.

MINERAL RESOURCES.

No adequate conception can be formed of the extent and value of the iron ore deposits in the Coosa valley. The fact that this is the southwestern portion of the Appalachian chain can only account for the masses of rich red and brown iron ores and the great variety of other minerals found in this valley, as the richest and largest deposits of minerals are generally found in the southwestern portion of the formation in which they exist.

Gold is found in Coosa county and elsewhere, and at one time the gold mines of that section attracted a large population.

A pure and very fine grade of kaolin is found in Calhoun and Etowah counties. Marble is abundant in Talladega, which is noted for its purity and beauty. Plumbago exists in Chilton, Coosa and adjoining counties, and it is claimed that tin has been discovered in Clay and Coosa counties, but red and brown iron ores, coal and lime are the predominating minerals found in the Coosa valley.

IRON ORES.

Iron exists in the greatest quantities in all portions of the valley. Large iron ore mines are being extensively worked at Gadsden, Attalla and Crudup, Alabama, from which hundreds of tons of red iron ore is mined daily. Brown iron ores are being very extensively mined in the Talladega, Anniston and Piedmont, Alabama, and Cave Spring, Georgia, regions, and the extent of these deposits is beyond conception. Large and inexhaustible deposits of iron are found right on the banks of the Coosa river, accompanied by coal and lime in great abundance in close proximity, which make the river bank a very desirable place for iron and steel making.

The present output of the iron ore mines of the Coosa valley will probably reach 1,600,000 tons per annum, representing a value of $2,400,000. And we might safely say that this amount of ore could be increased to almost any amount that mankind might desire.

LIME.

The lime interest of the Coosa valley demands more than a passing thought, when we take into consideration that the lime deposits of this valley are probably the richest and most extensive to be found anywhere in the United States, and the further fact that the greatest market for lime is found in the sugar refineries in Louisiana and the West Indies, and this market begins where the waters of the Coosa river (the object of this Memorial) empty into the Gulf of Mexico.

These lime deposits are found in great cliffs of pure limestone, assaying 98 to 100 per cent. pure lime, towering up over the river and valley hundreds of feet high. They are similar to the Cliff limestone region of the Ohio valley, except the Cliff limestone of the Coosa is superior in quality, in fact the lime of the Coosa valley is unequaled anywhere in purity.

The home consumption of this lime is quite extensive for building and domestic purposes, and thousands of tons of limestone are used annually for fluxing the iron furnaces of the

district in which the lime is found. This, in connection with the demand for this lime in foreign states and countries, for building and use in the sugar refineries, and the further fact that this lime is a very fine fertilizer for the sugar plant and other products of the fields of Louisiana, make the lime interest of the Coosa valley one of very great importance.

At Greensport, Trout Creek, Collin's Spring, and many other places along the river, these lime deposits hang over the waters of the Coosa, and with the Coosa river opened to through navigation to the Gulf would give river transportation to these rich lime deposits that would develop a lime trade almost beyond the imagination of the most sanguine promoter.

The Lagarde Lime and Stone Company, The Woodstock Iron Company, and the Cobb City Lime Company, all have large lime establishments near Gadsden, Alabama, and there are several large manufacturers of lime at Calera, Ala. The present output of lime from the Coosa valley may be safely estimated as follows:

	Barrels.	Tons
Lagarde Lime and Stone Company, lime	220,000	37,000
Fluxing rock	———	150,000
Woodstock Iron Company, lime	110,000	18,500
Fluxing rock	———	75,000
Cobb City Lime Company, lime	110,000	18,500
Fluxing rock	———	25,000
Jenifer Iron Company, Fluxing rock	———	30,000
Shelby Furnace Company, Fluxing rock	———	30,000
Calera District	328 500	64,000
Totals	768,500	448,000
The value of which will approximate		$416,000

THE COOSA COAL FIELD.

This rich coal field, so appropriately named after the beautiful Coosa river and valley in which it is found, lies in Shelby and St. Clair counties, Alabama, with a small portion extending about a mile and a half into Calhoun county east of the Coosa river at "Ten Islands" (the archipelago of the Coosa.) It ex-

tends entirely through St. Clair county, a distance of about 34 miles, and 24 miles into Shelby county, making the whole length of the field approximate 60 miles, running up and down the Coosa river, and is estimated to contain 350 square miles.

Professor McCalley in his estimate of the extent of the Coosa coal fields reaches the conclusion that with an output of ten thousand tons per day the coal in this region would last 165 years.

As for the quality and character of the Coosa coals, we quote from the report of Eugene A. Smith, Ph. D., Alabama State Geologist, in his report of the Coosa coal fields, 1895:

"While different seams of coal show special differences in the structure and composition, in this, as in all other coal fields, yet there are general features of similarity that distinguish these coals, as a class, from other coals. They are highly bituminous —free burning, yet rich in fixed carbon. Soft, easy to mine, free from bone or slate structure and also from combined sulphur or pyrite—generally called sulphur flakes, and often and fervently maledicted by the miners in other fields. They long sustain combustion, and leave but little ash or cinder, and no clinker, and are hence well adapted for raising steam, for forge work and for all other purposes of fuel.

"The most important characteristic of these coals is in their superior coking qualities. They will rank among the first class of coking coals. This is not a very extensive class, though coke can be made from most of the coals in the Appalachian field, which is distinguished as a field of coking coal, and which produces over ninety-five per cent. of all the coke made in the United States; yet all this coke that is of commercial value is made from very few seams, lying 'generally near the eastern limits of the field. For it is a recognized fact, and so stated by the highest authority, that the coal in the middle or western part of the field, is as a rule not so well adapted to coking as that in the eastern.' This is the case all through Pennsylvania and West Virginia, and doubtless in other parts of the field also. Hence the good coking qualities of the Coosa coals, lying as they do on the very eastern limits of the field, would be inferred from their position had they never been tested. But ample tests have

been made to demonstrate the fact that these coals are among the best of our coking coals.

"It was at the Innman mines, in the Fairview district, that coke was successfully made in commercial quantities on open ground without ovens; a fact so often referred to in statistics of the coking industry. The process was to pile the coal around small cones, built about two feet high of loose rocks and fire from the centre. These cones with the rocks all vitrified, and welded together yet stand as monuments of this unique, though successful process.

"The excellence of the Coosa coal and coke has been shown in this report, and it is hoped that their production may be very greatly increased in the future; the commercial interests of the State, and the metallurgical prosperity of the adjacent valleys demand that vigorous and persistent efforts be made to promote this result."

True indeed are Dr. Smith's last remarks regarding the importance of the development of this great coal deposit, and this can best be done by opening the Coosa river to through navigation to the Gulf of Mexico, where an endless market can be had for the products of this rich field. The Coosa river is the natural route for transporting this coal, iron and lime, the route designated by nature, and now that there is almost a coal famine in Europe, and it is becoming apparent that the United States must soon to a large extent supply the world with coal, the opening of the Coosa river is a project of international as well as national importance.

With the building of a trans-isthmian canal, with our numerous naval coaling stations along the gulf coast and on the outlying islands of the gulf and Carribbean sea, the item of good, cheap coal, easy of access, and capable of being transported quickly and in large quantities, becomes of vital importance. The following extract from the Cincinnati *Commercial* shows the superiority of river transportation, both in cost and time, for such freights as coal:

"The towboat, Jos. B. Williams, is on her way to New Orleans with a tow of thirty-two barges, containing six hundred thousand bushels (seventy-six pounds to the bushel) of coal

exclusive of her own fuel, being the largest tow ever taken to New Orleans or anywhere else in the world. Her freight bill, at 3 cents a bushel, amounts to $18,000. It would take eighteen hundred cars, of three hundred and thirty-three bushels to the car, to transport this amount of coal. At $10 per ton, or $100 per car, which would be a fair price for the distance by rail, the freight bill would amount to $180,000, or $162,000 more by rail than by river. The tow will be taken from Pittsburg to New Orleans in fourteen or fifteen days. It would take one hundred trains of eighteen cars to the train to transport this one tow of six hundred thousand bushels of coal, and even if it made the usual speed of fast freight lines, it would take one whole summer to put it through by rail."

This extract is a statement of actual facts and not an estimate of what may be accomplished.

Now, an examination of a map of the United States will show the great saving in distance, by river, from the coal fields of the Coosa to the gulf over that from the coal fields of the Ohio. An examination of a map of the gulf and Carribbean sea will show that the port of Mobile has the advantage over New Orleans in being nearer to the islands of these seas. We have not given these distances in miles for the reason that the graphic representation on the maps gives a clearer idea of the great advantage of the Coosa river in the matter of the saving of distance than any mere figures can give.

Notwithstanding the limited and almost inaccessibility of a large portion of the Coosa coal fields to transportation, the output of coal from this field is now 200,000 tons per annum, valued at $300,000.

MANUFACTORY.

The Coosa valley is fast becoming a manufacturing center, almost every class of manufacturing is represented here. Cotton factories, iron furnaces, car and car wheel works, rolling mills, pipe works and lumbering mills, are the principal industries found in the valley, though there are a large variety of other classes of manufacturing carried on. The products of these

factories find a market in all parts of the world. The export trade of the valley is quite extensive and increasing annually. The opening of the Coosa river to through navigation would give a water route of transportation from the very doors of a great many of these factories to all the great markets, and would stimulate the building of more factories and the exportation of their products, until the Coosa valley would soon be second to none as a manufacturing center. The Massachusetts cotton mill at Rome, Georgia, export a large portion of their products, and the entire product of the big Dwight cotton mill at Gadsden, Alabama, is exported, which alone amounts to over $2,000,000 per annum. The Central Foundry Company, of Gadsden, and Anniston, Alabama, export large quantities of cast iron pipe and are now filling a large order for Switzerland. The exportation of iron, lumber, and many other products of the factory is quite extensive.

The annual iron production of the Coosa valley, though in its incipiency as compared with the rich deposits of raw material for iron making found here, is as follows:

Rome, Georgia	1 Furnace	36,000 Tons.
Round Mountain, Alabama	1 "	18,000 "
Gadsden, Alabama	2 "	140,000 "
Attalla, Alabama	1 "	20,000 "
Anniston, Alabama	2 "	150,000 "
Talladega, Alabama	1 "	75,000 "
Ironaton, Alabama	2 "	145,000 "
Jenifer, Alabama	1 "	50,000 "
Shelby, Alabama	1 "	36,000 "
Totals	12 Furnaces.	670,000 Tons.

The value of which is about $10,000,000 per annum.

COTTON FACTORIES.

Rome, Georgia	Cotton Goods	8,000 Tons.
Gadsden, Alabama	" "	6,000 "
Anniston, Alabama	Cotton Goods and Yarns	5,000 "
Other Yarn Mills in the Valley		2,000 "
Total		21,000 Tons.

Which approximates in value $8,500,000.

Car and Carwheel Works.

GADSDEN AND ANNISTON, ALABAMA.

Carwheels, bar iron and other manufactured products, 170,000 tons, valued at $5,300,000.

Pipe Plants.

GADSDEN AND ANNISTON, ALABAMA.

Cast iron pipe, 100,000 tons, valued at $4,000,000.

Carpet and Cordage Mills.

Anniston, Alabama, 525 tons, valued at $250,000.

There are hundreds of other manufactures of which we have no way of arriving at a correct valuation and extent of their annual products, hence they are also left out of this compilation.

The annual tonnage and value of the products of the factories as above shown is 961,525 tons, valued at $28,050,000.

Recapitulation

OF THE FOREGOING ANNUAL RESOURCES OF THE COOSA VALLEY.

Agriculture	502,000	Tons,	Valued	at	$16,000,000
Timber	150,000	"	"	"	5,600,000
Iron Ore	1,600,000	"	"	"	2,400,000
Lime	448,000	"	"	"	416,000
Coal	200,000	"	"	"	300,000
Manufactory	961,525	"	"	"	28,050,000
	3,861,525	Tons,	Valued	at	$52,816,000

In return for this vast amount of resources, in the ordinary exchange of commerce we must naturally have almost a like amount in value returned to the Coosa valley, though the articles so returned being in a more refined state, the tonnage on the incoming goods would probably be about half that of the outgoing.

This would give us to be handled in the Coosa valley annually 5,792,287 tons of freight, valued at $105,732,000.

By the opening of the Coosa river to through navigation to the Gulf of Mexico, twenty per cent of this great mass of commerce would be transferred to the Coosa river, which would make 1,158,457 tons of freight, valued at $21,126,000 to be handled annually on the Coosa river. Then, in addition to this, it is safe to say that by the opening of the river new enterprises would spring into existence and a vast amount of new traffic would open up in iron ore, coal, lime and lumber from the rich districts lying idle in the valley, thereby more than doubling the river tonnage.

Taking into consideration all these facts, it is safe to say that with the Coosa river open to through navigation, the commerce to be handled on the bosom of this great water way, would approximate two and a-half million tons per annum, which would give 6,850 tons daily. This would require 23 steamers per day, of 300 tons burden each, to handle this great mass of freight.

WATER POWERS.

There are many valuable water powers on the numerous tributaries of the Coosa river and many more could be established on these smaller streams; then in addition to this, the locks and dams that will be constructed in the work of opening the Coosa river to through navigation will develop immense water powers all along that portion of the river upon which such locks and dams are built.

The fall from Greensport, Alabama, to Wetumpka, Alabama, that portion of the river in which the rapids occur, a distance of 142 miles, is 367 feet. The total number of horsepowers that can be developed from the fall and water discharge on this part of the river is 382,882 horsepower. By the opening of the river to through navigation would give river transportation from these great water powers to all parts of the world, and would stimulate the development of these powers and their utilization for operating factories of all kinds until the Coosa river would soon be almost lined with factories from its source to its mouth.

NATIONAL IMPORTANCE.

The Coosa river, reaching like a bandeau across the State of Alabama from Rome, Ga., to Mobile, crosses every line of railway that extends from the Alabama cotton, coal, and iron fields and the great pine forests, to the gulf and South Atlantic. The cost of these elements of industry, commerce and civilization is a fact that interests the people of every section of the United States.

The cheapening of the cost of transportation on these commercial necessities is a duty of the government when it holds the paramount control of such a channel of navigation.

The Coosa river has claims to national care and consideration that are not possessed by any water course of the United States, of similar length, not yet open to steam navigation. On the banks of this river, great geological systems are in contact with each other, the river draining each of them. Such a condition is not presented elsewhere in the United States, if it is found in any other country.

These systems, bearing the rich material of their full development, each contribute to industry and commerce the indispensable element of progress in agriculture and the arts that are in universal use. Among these are coal, iron, lime, marble, granite, the slates, kaolin, mica, asbestos, and many cognate minerals, with soils, clays, sandstone and other useful materials of great variety.

Such geological areas are found elsewhere in the United States in perfection, and each of them is indispensable in the grand aggregate of our material resources, but they are widely separated in other localities, and their transportation from one field to the other is so expensive that their value is much diminished.

Along the banks of the Coosa river, these several formations meet, and that river is a natural conduit for their interchange. The forests, and the productions of these several systems, are indigenous to such formations, and are very rich and varied.

The use of the Coosa river as the commercial outlet to the ocean for this immense field of industry, in agriculture, forests,

quarries and mines, is a great national duty that is devolved on Congress. The United States, being the paramount power entitled to improve this river, the states of Georgia and Alabama cannot do this necessary work.

Congress has continuously prosecuted this national duty, and the only question is whether it shall now be abandoned, or prosecuted to a success that is commensurate with its vast importance.

PRESENT IMPROVEMENT.

The present improvement of the Coosa river now being carried on under the auspices of the War Department of the United States, was begun in 1870, but owing to the meagre appropriations for that purpose, the work has progressed very slowly, and frequently during this period, as is now the case, the work has been almost entirely suspended. Delays like this with the work standing in an unfinished state, necessarily cause heavy damage to the work previously done and so demoralize the forces, until it takes a good portion of the next appropriation to reorganize and place the work back on its former footing. Much of the appropriations have been spent in this way, while if sufficient sums of money were appropriated to push the work to completion, would save all this useless delay and expenditure of money. We have no criticism to make except as to the inadequate sums of money appropriated for this important work.

There has been appropriated for this work up to the present time $983,700, covering over a period of twenty-four years. These appropriations were made at times and in amounts as follows:

August 14, 1876	$ 30,000
June 18, 1877	75,000
March 3, 1879	45,000
June 14, 1880	75,000
March 5, 1881	60,000
August 2, 1882	83,700
July 5, 1884	50,000
August 5, 1886	45,000
August 11, 1888	60,000

September 19, 1890	150,000
July 13, 1892	130,000
August 18, 1894	110,000
June 3, 1896	50,000
March 3, 1899	20,000
Total	$983,700

It has been suggested that it would be better to abandon this entire scheme, rather than continue this wasteful plan of operations. To abandon this project would be to repudiate the purposes of our forefathers as far back as 1823, and throw away all the money that has been spent on this important stream. When we take into consideration these facts in connection with the magnitude of the river, the rich fields of agriculture, forests, iron ore, lime, coal and manufacturing through which this magnificent stream flows in such close proximity to the seaboard, the abandonment of this project cannot be within the contemplation of any rational man.

The able engineers in charge of this work estimate that $6,000,000 will give four (4) feet slackwater navigation from Lock Four to Wetumpka, Ala., which is the portion of the river now closed to navigation. This money can be more economically spent in six years than it can be in twelve, and more economically spent in twelve than in twenty-four. Therefore we recommend and ask: That Congress place the work of opening the Coosa river to through navigation on the CONTINUOUS CONTRACT PLAN and appropriate six million dollars, to be spent in six years in the opening of this important stream. The work to be done according to the plans and specifications previously furnished by the engineers in charge, and that the work be commenced at Lock Four, and continue down the river from there, and at Wetumpka and work up the river from that point, and continue in this form until completed.

We also recommend and ask: That Congress pass an act authorizing the utilization of the water powers developed by the locks and dams constructed in the progress of opening the river. Such utilization to be accomplished in such a way as not to interfere with navigation.

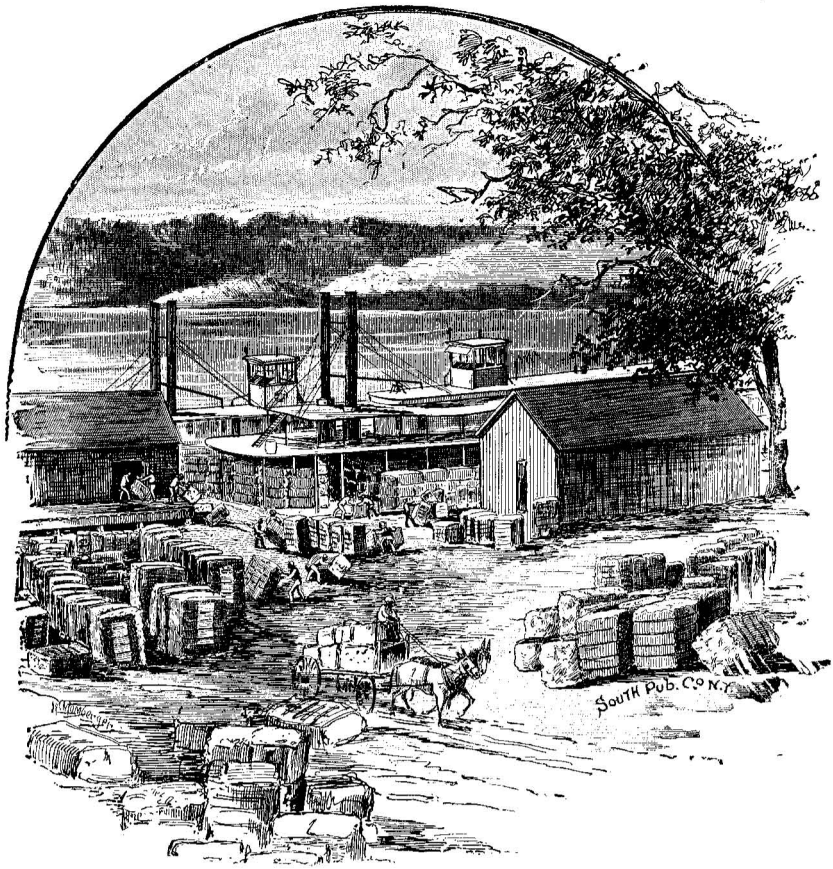
SUMMARY.

Now in conclusion your Memorialists in summarizing the foregoing beg leave to say that the Coosa valley with its beauty and grandeur; its salubrious climate; its perpetual gushing springs and streams; its fertile fields of agriculture, upon which is found almost every plant that grows in the temperate zone, intermingled with its virgin forests; underlaid with its rich fields of coal and iron; beautified with its towering ranges of sandstone, granite, and cliff limestone; with its diversified manufacturing interests, and its numerous and immense water powers; penetrated by the Coosa river with its meanderings across the valley from side to side, thereby touching almost every commercial interest and deposit found here, all in such close proximity to the seaboard is without a parallel; and with the opening of this great waterway to through navigation to the Gulf of Mexico, and the completion of the Nicaragua Canal, will give a short water route of transportation from the very doors of these diversified interests, via the Coosa river and the Nicaragua Canal to the Eastern Continent. With this completed the Coosa valley will be second to no spot on earth.

Respectfully submitted,

W. P. LAY, Gadsden, Alabama, *Chairman.*
J. W. BURKE, Mobile, Alabama,
FRANK H. LATHROP, Riverside, Alabama,
G. B. RANDOLPH, Anniston, Alabama,
CABOT LULL, Wetumpka, Alabama,
G. B. GASTON, Montgomery, Alabama,
H. H. STEWART, Selma, Alabama,
D. B. HAMILTON, Rome, Georgia,
EBEN HILLYER, Rome, Georgia,
J. A BLOUNT, *Secretary.*

Committee.



STEAMBOAT LANDING, GADSDEN, ALA.

APPENDIX.

Extract from a Paper Read by Maj. C. F. A. Flagler, U. S. A., before the Annual Meeting of the Alabama Commercial and Industrial Association at New Decatur, April 18-19, 1900.

"The Coosa river, formed at Rome, Ga., by the junction of the Oostanaula and Etowah rivers, is over 300 miles long; it unites with the Tallapoosa near Wetumpka to form the Alabama. It is now navigable at all seasons from Rome throughout two-thirds of its length, but the lower third is a succession of shoals and rapids that can only be passed by means of locks. Thirty-one locks are needed on this river to make through navigation possible, and of these four have been constructed and three are in operation. The estimated cost of this work was $6,000,000, and $1,300,000 of this amount has been expended. The commerce of that part of the river now navigable between Rome and Lincoln is $2,000,000 per annum, even without a water outlet; its tributaries drain the gold ocher and marble fields of Georgia. In northern Alabama it flows through mountains of iron ore (both maemetite and limonite), vast beds of slate and coal, and all these covered by dense forests of long leaf pine. The commerce to and from cities in the valley of the Coosa exceeds $20,000,000 annually, and fully one-quarter of this will find its way to Mobile and the commercial world by the water route, when the lower Coosa shall be opened. No appropriation has been made for the locks on this river since 1896, and this magnificent waterway, after the expenditure of over a million dollars, appears to be abandoned by Congress. On all other parts of the state where rivers merit improvement, appropriations are made with lavish hand. Why is the Coosa, the key to nature's richest valley in the State of Alabama, forgotten?"

COPY OF RESOLUTION

Passed by the Alabama Commercial and Industrial Association at its Annual Meeting in New Decatur, Alabama, April 18-19, 1900.

WHEREAS, The opening of the Coosa river to navigation is of the most vital importance to the commercial interests of the South and to its trade with foreign countries; and

WHEREAS, Since 1896, no appropriations have been made by Congresss looking to this desired end; now, therefore,

BE IT RESOLVED, By the Alabama Commercial and Industrial Association in annual convention assembled, representing the material interests of the entire state, that we hereby respectfully petition Congress to renew the appropriations for continuing the valuable work already begun in opening up the Coosa river to navigation.

L. L. GILBERT,
Secretary and Treasurer,
Alabama Commercial and Industrial Association.

IMPROVEMENT OF NAVIGATION.

Speech of Senator Morgan before the Coosa River Improvement Association.

The following address was delivered by Senator John T. Morgan before the Coosa River Improvement Association, which met at Gadsden, Sept. 27, 1899:

MR. PRESIDENT: This convention is of unusual importance to the people of Alabama, Georgia and East Tennessee, as it will deal with the question of transportation and outlet for a very extensive and beautiful country that abounds in the resources of wealth.

The question we are trying to solve is not new, but the rapid development of these resources gives to it a new and increasing interest, as each year discloses new and important features of its commercial importance. Alabama began, at an early day, to

consider the subject of opening the Coosa river to steam navigation, and the Government of the United States, for more than forty years, has contributed to this important work. That more rapid progress has not been made is due to the necessary diversion of the efforts of Congress towards other river and harbor improvements, for which there was a more immediate demand, chiefly in the Bay of Mobile and the Mussel Shoals Canal.

The Bay of Mobile being the outlet to the sea from the Coosa river, it was not an urgent necessity to open the river until its commerce could be carried to the Gulf of Mexico on vessels that could transport it on the highway of the Atlantic Ocean.

My earliest efforts in Congress were directed to the dredging of a channel for sea-going vessels through the Bay of Mobile, for the common benefit of all the rivers that are tributaries to the Alabama river. This work has progressed to the extent that vessels drawing twenty or more feet can reach the wharves at Mobile through a sub-marine channel 31 miles long. This channel is being cut deeper and wider, and will soon accommodate ships of commerce of the largest size. The time has thus arrived when it is useful and necessary to open up the navigation of rivers that form the great body of waters that flow into the Bay of Mobile. The Warrior and Coosa rivers are the waterways to the Gulf, through which will be transported iron, coal, timber and stone, which are of incalculable value, for ages to come. As this vast wealth is developed by coming generations, the necessity for these channels of commerce will become more pressing, so that the work we are trying to promote will be hereafter classed among the most important that the people of any state of our Union have ever engaged in. When an outlet to the Alabama river has been opened into the Pacific ocean, through the Isthmus of Darien, we will have accomplished the true and necessary movement that above all is needed to make the country through which the Coosa river flows as desirable as any region of the earth. Its beauty is simply indescribable in any phrases that I could employ. Its fertile fields and its magnificent forests, its many water springs, and its swift flowing streams, its vast mines of coal and iron, and its quarries of granite, limestone, andstone, slate and marble, enrich this region with an availables

wealth of natural resources that is without a rival in any other country. This is due to their quality, abundance and their juxtaposition. This is a broad statement, but it is literally true. If there was no other fact on which to rest this statement than the proximity of the Coosa river to the coal and iron mines of the Birmingham district, it would be sufficiently established. A line of railway, and several practicable lines of waterway, not exceeding 40 miles in length, would make the Coosa river the bearer of a large part of the enormous burden of productions from the mines and factories of the Birmingham district to the seaboard.

That district, flanked on the west by the Warrior river, and by the Coosa river on the east, with the Cahaba river draining it to the south, must rely largely upon water transportation to sustain its supremacy already established, over the iron and steel markets of the world, and the Coosa river will ultimately become its largest and cheapest outlet.

But the valley of the Coosa river, considered with reference to the staple materials of commerce that are found in the fields, forests and mines that are in its immediate vicinity, has an abundance of the resources of commercial wealth, located so conveniently to the seaboard, that no river in the United States, not yet opened to navigation, is so important to the general commerce of the country. The lands that are drained by its waters comprise the most fertile areas that are found in the five distinct geographical systems that unite along its shores; in each of which formations the forest and the field productions are distinctly characteristic of these various soils. They are all adapted to the growth of cotton, while some of them are better suited to the production of fruits, or corn, wheat and oats, and others to the root crops and the grasses and other forage plants. The prolongation of a branch of the great valley of Virginia extends to the upper waters of the Coosa river and along its eastern border, as far south as Coosa county, the other prong of the valley forming the broad and beautiful valley of the Tennessee river.

Between the navigable waters of the Tennessee and the Coosa rivers, there is so low a divide that plans have long been formed and government surveys have been made with most sat-

isfactory results, to connect them by a canal. But that work is still remote as a practical result of future efforts, and I merely allude to it as an inviting possibility.

The valley that I propose to consider may be properly called the valley of the Coosa river, for all the purposes of commerce along that water course. It comprises a tongue of the clay and limestone lands, that reaches far south from the valley of Virginia, with its characteristic productions, supplemented by the cotton plant, and contains, at frequent intervals, immense deposits of hematite iron ores. In this wide region all agricultural pursuits are conducted with great success by a splendid population, but not one-tenth of its actual productive power has yet been realized. At its southern extremity vast ledges of the purest white marbles are found. This system meets the granite formation, like that of New England, on the east bank of the Coosa river, which extends as far south as Wetumpka. Opposite to these formations are the coal measures, the Coosa river being the line of demarcation. Within the area of the coal measures there are alternate valleys of lime lands and ridges of iron ores, some of which extend to the western border of the river. These ores are red hematites, and are stratified in thick veins, extending for many miles in lines parallel to the Coosa river.

The coal measures disappear on the Coosa river, in Shelby county, where they are joined by a silicious formation which extends south through Chilton and Autauga counties. At this point the Coosa river has joined the Tallapoosa, to form the Alabama river, and its course is laid in a deep channel cut through the rotten limestone and shell lands—the cretaceous formation—that was once the bed of the sea, as we are told by geologists. Over all this great area the forests that are native to these soils, tower in magnificent height and strength, and in great variety. They, alone, constitute a source of great commercial wealth. But the real value of this extraordinary region lies in the fact that five different geological systems meet at this common centre. Commerce consists most largely in the interchange of commodities that are peculiar to these separate systems the world over, and the saving of the cost of such interchange is the chief value

of this region in the commercial sense. The Coosa river, opened to navigation, will not only cheapen the cost of this local interchange, but it will carry out to the sea an unlimited supply of the productions of these five systems, on a single line of transportation, while in the great majority of cases, they are only to be assembled on different lines that reach the seaboard, often far separated. In no other country, and scarcely at any other place, is it possible to ship on the same vessels, from the same contiguous region of origin, a cargo composed of iron, steel, coal, granite, lime and limestone, marble, timber of pine, cedar, oak, walnut, poplar, cherry, ash, and other valuable woods, cotton, corn, wheat, oats, potatoes, onions, peas and other exportable field crops, and fruits, cattle, hogs, mules and horses. Such a diversified and abundant commerce in staple commodities cannot be found in an equal area in any country on the globe as can be gathered from the twenty thousand square miles drained by the Coosa river and its tributaries.

I hope that a committee of this body will be raised to gather the statistics, actual and proximate, of the trade that will find transportation on the Coosa river from these and other sources of supply. I could furnish some data, gathered from the reports of enquirers and others on this subject, but sufficient care has not been taken to make the figures to correspond with the facts, and I need not occupy your time with mere conjectures. Every one can see at a glance that the field we are exploring is wide and important to the whole country, and that its yield of rich harvests is beyond doubt for all time. Our action in this matter should be prompt and efficient, based on the solid facts and rationally adjusted to success.

Few meetings of greater importance to the people have assembled in Alabama, for the time has now arrived for successful effort to open the Coosa river.

Our systems of railroads are so located that all the trunk lines are either crossed, or touched by the Coosa river. It is competitive with all of them. The trend of the river, from the northeastern to the southwestern corners of the state, creates this competitive highway for the free use of the people,and makes it impossible that a trust or combination between any two or more

of the great trunk lines of railways can corrall the commerce of the state and levy upon it discretionary rates of toll for freights.

No other state has a waterway through its entire length that so completely negatives the power of railroad combinations to control the freight charges on its commerce. The time has arrived when the demand for large appropriations for the Bay of Mobile and for the Tennessee and Warrior rivers will no longer divide the attention of our delegation in Congress;those improvements being nearly completed or provided for, and we will be, happily, aided by the delegations from Georgia and Louisiana in getting appropriations for the Coosa river. Other advantages are of conspicuous importance to the eastern parts of Alabama,in the opening of this river to navigation. In part, they include the effective development of a vast water power at many localities, for manufacturing purposes and in the distribution of that power, by electric wires, into the homes of skilled workmen, to be employed in special industries.

There is no brighter hope than this new force for the emancipation of skilled labor from the crushing power of concentrated capital in great factories.

One day the valley of the Coosa river will rejoice in thousands of homes, where the fathers with their children and apprentices around them will produce the fruits of their skill, with all their profit, under their own roofs. The limestone bluffs of the Coosa river are the nearest, by water, to the sugar lands of Louisiana and Cuba, and this will create a large amount of transportation on that water way, as well as a very important industry. I have already touched on the leading features of the prospective value of the navigation of the Coosa river to the other people of the state and the state of Georgia, without giving attention to the active enterprises now in operation along the upper reaches of the river, which have no connection with the foreign markets, except by rail. A great cotton factory here in Gadsden is making a large quantity of cotton goods, almost exclusively for the Chinese trade, and has recently enlarged its works to double their former capacity. This is one of many illustrations of the fact that the world is reaching out for the productions of this lovely valley, as articles of permanent trade.

The improvements of the Coosa river have already cost the government a considerable sum, which has not extended the navigation to a mileage that would have been opened if the appropriations had been larger and more uniform. Still, a great work has resulted, which has already added much to the wealth of the country.

Without reciting the details of the careful surveys and estimates that have been ably conducted, we have before us a task that it will cost $6,000,000 to complete, so as to give four feet of water at the shoal places in the river and to remove obstructions from its channel. This sum could be expended more economically within six years, than if ten years were consumed in unnecessary delays. I therefore propose, as the basis of our efforts, that we will ask Congress for an appropriation of six millions of dollars, to be expended within six years, to open the navigation of the Coosa river.

No argument is now needed to commend this work to the consideration of Congress as a proper work of river improvement. For more than forty years Congress has conceded its importance and has adopted it as a national enterprise.

The question now is, whether we shall continue a wasteful policy of making inadequate appropriations, or take up the improvement of the river in earnest and supply the work with adequate appropriations.

In the reports of the engineers on this work the advice is freely and repeatedly given that the entire scheme should be abandoned rather than continue the wasteful plan under which, for want of sufficient money to properly protect the work, the winter floods damage or sweep away much that was done in the previous summer.

The abandonment of the purpose to open the navigation of the Coosa river cannot be within the contemplation of any rational man. As a state measure, we had better tax our people to raise the money, than to abandon the project. Without reference to any other consideration than the competitive power of this waterway in the control of the cost of transportation of our productions by rail, it would save to the people in a few years, the entire outlay. When the Isthmus of Darien is cut by a ship

canal, which will be done within six years, the outflow of commerce from the Coosa river will be of vast importance in the increase of the wealth of the state.

But Congress has dealt with this great work with a spirit of determination to accomplish it, and now, that wider commercial fields are opening up to our people in the islands of the Carrribean sea and the Pacific ocean, the national duty is made plain to the government of the United States, to connect this region of abounding wealth with the seaboard by a great waterway.

I can scarcely refrain from expressing my conceptions of the splendid progress that will attend the labors of the strong, courageous and enlightened people who possess this favored region of Alabama and Georgia, when the Coosa river is fully opened to navigation. Already these valleys and hills afford every advantage and charm that Nature could provide, in climate, soil, forest and stream for the development of a great race of people into the highest civilization. When they are provided with proper access to the seaboard, they will bring with them sheaves of abundant riches to the state, and valuable contributions to the commerce of the world.

After careful reflection I am convinced that, in variety, excellence and abundance of natural resources, and in their relations to each other and to the facilities and cost of transportation, Alabama has within her 52,000 square miles more wealth in the commodities that enter into commerce than is found in any like area on the globe. I will ask your attention, however, only to the feature of transportation for moving this material to market, as that is the special matter we have met here to consider.

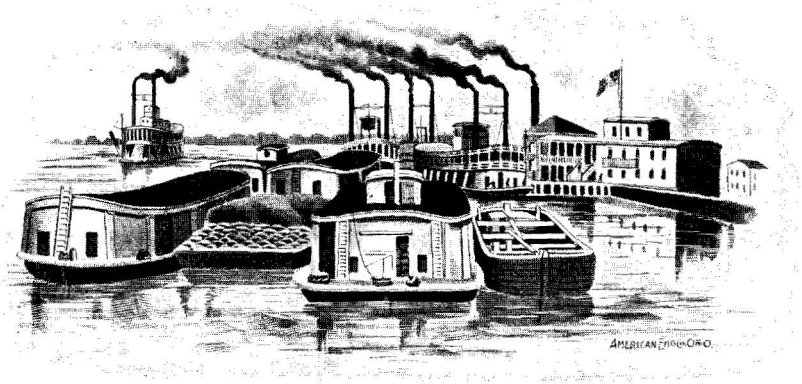
In every part of Alabama the industrial classes are in easy reach of water transportation to the Gulf of Mexico, when our rivers are open to steam navigation. These waterways and the railways follow the same valleys to the Gulf of Mexico, and are everywhere competing lines of transportation. The Mobile and Ohio railroad is in competition with the Tombigbee river. The Louisville and Nashville railroad is in competition with the Warrior, the Cahaba, the Coosa and the Alabama rivers. The Southern Railway is in competition with the Coosa and its tributaries, and with the Alabama river. The Plant system and the

Central of Georgia are in competition with the Alabama, and Chattahoochee, and with several navigable streams that lie between them. The Memphis and Charleston railroad and the Alabama Great Southern are in competition with the Tennessee and Coosa rivers. This situation demonstrates the necessity for energetic and persistent effort to open all these waterways to steam navigation, so that our vast productions shall have the double advantage of rail and water transportation to the seaboard. When this remarkable combination of facilities for transportation is completed, no equal area in the world can supply to other countries the leading staples of commerce so abundantly and at such low cost for transportation as Alabama will afford.

The Tennessee and Mississippi rivers, the Gulf of Mexico, and the South Atlantic, almost insulate the great coal and iron districts of Alabama, which rise from the center of this belt of great rivers and oceans to a height which give a down grade to reach water transportation in all directions, but is not great enough to obstruct railroad lines at any point from the center to the circumference of the Coosa and Warrior coal and iron fields.

It is no longer a question that this great area is a mighty factor in the future problems of the world's progress in civilization, and that a duty rests on this generation to develop this wealth in the early years of the twentieth century.

The cost of the work we are trying to promote is really insignicant, as compared with the contribution of wealth and power it will bring to our country in the near future and for all time to come.



OPENING THE COOSA RIVER.

Tribune, Rome, Ga., April 13, 1900.

The Floyd county grand jury which adjourned Wednesday made this very important recommendation:

"We earnestly recommend and petition the Congress of the United States to continue the appropriations for the opening of the Coosa and Alabama rivers in Georgia and Alabama from Rome, Ga., to Mobile, Ala., as reported by the United States engineers, and previously presented to congress in former bills and memorials. We regard this work of the highest importance and second to no river improvement in all the southern states. We earnestly implore the interest and support of the Georgia and Alabama delegations in Congress to this measure."

The *Tribune* wishes to call special attention to this recommendation because of its great importance to this section. Dr. Eben Hillyer, who was a delegate to the Coosa river convention held at Gadsden last September, went before the grand jury and presented the matter so strongly that the body at once decided to incorporate it as a part of its recommendations.

The opening of the Coosa river is of so vast importance to the coal, iron and cotton interests of Alabama and northwest Georgia that only a dreamer can properly figure what it will lead to. It will be remembered that at the Coosa river convention

the great Senator Morgan spoke on the subject, "The Coosa River via Nicaragua Canal to Manila." His presentation of facts and figures of the future prosperity to the section to be benefitted was amazing. We only hope that some day he may address the citizens of Rome on the topic, "From Rome via Coosa River and Nicaragua Canal to Manila." It will certainly open their eyes to the incalculable benefits and prosperity which will follow from an open water way from the North Georgia mountains to the Gulf of Mexico.

DEMAND FOR AMERICAN COAL.

Atlanta, Ga., Constitution, April 14, 1900.

The demand for American coal now extends from Russia to Japan, and embraces every country in the world using artificial heat and power.

The occasion for this sudden demand is the inability of the English mines to fill their orders, caused by home demands for domestic and war purposes. All along the sea fronts of the Atlantic, the Mediterranean and the Baltic manufacturers and dealers are making inquiries through the consulates. One French railway has contracted for 600 tons daily delivery, while the arrival of 6,000 tons of Virginia coal in Japan shows that the demand circles the world.

The reasons for this increased demand are not confined to the inability of the English to supply, but are local as well as commercial. American coal is declared to have greater heating strength than that of the continent, which often is but little better than peat. This makes it the coal for manufacturing purposes. The only obstacle in the way is the want of American tonnage. Coal, to be profitable, must be shipped in large quantities. Now that the demand has broken away from England, America has the chance to secure it.

The large coal deposits of the southern states make these developments of great interest, as furnishing another item of wealth to our people.

ALABAMA COAL.

Orders Pouring in from all Directions for It.

WANTED IN EUROPE, THE WEST INDIES AND MEXICO—RISE OF PRICES IN EUROPE A FACTOR.

Birmingham, Ala., Age-Herald, February 28, 1900.

BIRMINGHAM, ALA., February 28.—Because of the rise in price of European coal, and the scarcity of that product, inquiries are pouring in from Europe, the West Indies and Mexico for Alabama coal. Heretofore Mexico and the West Indies have obtained their supply of coal from water, for the reason that on account of all water transportation they could get it cheaper than from Alabama. Now the rise in prices in Europe places Alabama coal, which must pay a rail freight to the coast and a water rate thence to the point of delivery, about on a parity with that of Europe. The Tennessee Coal and Iron Company yesterday accepted an order for 30,000 tons of coal for Mexico, making contracts amounting to 50,000 tons, which that company has recently taken from Mexicans. It also has on hand a 10,000 ton contract from Cuba. It has refused an order for 100,000 tons from the British government because of the tremendous home demand for coal.

Other companies of this district, however, have taken several large European orders as well as orders from Mexico, and were it not for the enormous demand for Alabama coal for local use, following the big boom in iron, immense sales could be made in Europe, Mexico and South America.

LINCOLN'S PROSPERITY.

Four Hundred Bales of Cotton Shipped by Steamer.

Age Herald, Birmingham, Ala., January 12, 1900.

Lincoln, January 11.—(Special.)—The people of Lincoln are jubilant today over the events of yesterday. At 11 o'clock a. m. the "Willie C. Wagnon," of the Georgia and Alabama steamboat line, in charge of Captain George H. MaGruder, arrived at Lock Four on the Coosa and began loading cotton. By 6 o'clock in the evening the little boat had on her cargo of four hundred bales, consigned to the Howell Cotton Company at Rome, Ga. She is now hastening home and will return about Saturday for another cargo of four hundred bales. Six hundred and seventy-four bales of this cotton was shipped by J. C. Wilson & Son, of Lincoln, and 126 bales by Law & Davis, of the same place. This shipment of 800 bales is less than one fourth of the cotton receipts, yet these enterprising merchants have made one thousand dollars in the increased price over other markets and means of transportation. Had they made the same trade on the other part of the cotton receipts, Lincoln would have saved five thousand dollars on this year's crop. Twenty-five wagons did the drayage at two cents per hundred pounds. Lock Four is only three miles from Lincoln, and the road is about the best in the county. The farmers will gladly do the draying at the price named, and all of our next year's cotton receipts will probably be shipped to Gadsden and Rome, and the wholesale merchants of those cities will now put in a lively bid for Lincoln trade.

Captain MaGruder was pleased with wharfage facilities at Lock Four and expects to make many more trips of like nature. This shows what the opening of the Coosa means for the people.

RESOLUTION.

WHEREAS, The Floyd county, Georgia, grand jury has earnestly recommended and petitioned the Congress of the United States to continue the appropriation of the Coosa and the Alabama rivers in Georgia and Alabama to Mobile, Ala., and,

WHEREAS, A committee will visit Washington on May 15, 1900, to present to the Harbors and Rivers committee of the United States a memorial setting forth the action of the grand jury of Floyd county, state of Georgia, and,

WHEREAS, The opening of the Coosa river is of vast importance to the coal, iron and cotton interests of the state of Alabama, now, therefore

BE IT RESOLVED, By the Board of Directors of the Mobile Chamber of Commerce of Mobile, Ala.:

That the Senators and Members of the House of Representatives from the state of Alabama be requested to lend all their influence and assistance to the committee presenting the memorial to the end that the Coosa river project be favorably considered by the Rivers and Harbors committee of the United States.

Attest: ED. E. ENGLAND,
Sec'y Chamber of Commerce.

Mobile, April 28, 1900.

THE DEVELOPMENT OF THE LIME INDUSTRY OF THE COOSA VALLEY AND ITS GREAT POSSIBILITIES.

BY JOHN B. LAGARDE, OF NEW ORLEANS, LA.

Concerning future consumption of lime in the Louisiana and Mississippi delta, I beg to state that in addition to the already enormous consumption of lime in the manufacture of sugar, with the use of lime as a fertilizing agent, for the heavy argelaceous soil of Louisiana, which is practically devoid of any alkali whatever, the future use of lime in that district is something of more than passing importance.

In very recent years the Louisiana planters have become cognizant of the fact that the use of lime for the rapid and mature growth of sugar cane is destined to play a most important part in its cultivation. But the serious question that confronted this important subject has not only been the supply of a suitable grade of lime, but the freight transportation more especially. Louisiana alone uses annually something over one quarter of a million tons of nitrogenous fertilizers, which are shipped principally from the packing centers of the west, in the way of packing house tankage and cotton seed meal, from Texas, Arkansas, and Mississippi. These fertilizers, which are more of a stimulant, promote the vegetation directly without any appreciable good to the soil, in fact, in some cases, to the actual detriment of Mother Earth. Lime, as I have said before, is an indirect fertilizing agent. It possesses chiefly but two virtues, which are most important in the maintenance of fertility in soil; first of all, it sets free all inert and unavailable potash that abounds so plentifully in alluvial soils. The plant takes up readily this element that otherwise remains absolutely unavailable; secondly,

lime in its composting character improves, disintegrates, and mellows heavy clayey soils, the result of which is of all importance in rendering the mechanical condition of the lands such as it should be for the successful cultivation of a crop.

There is indeed a history that could be written on lime as a successful and important fertilizing medium, the results and virtues of which date back centuries ago in southern Europe, but unfortunately the unattractive method of transportation heretofore has been such that this subject has by reason of this fact remained as if it were dormant, with the Louisiana sugar planter.

To give you an idea of what tonnage could be expected from the Louisiana markets, in the way of fertilizing, lime could be figured by the following comparison, namely: A nitrogenous fertilizer, possessing as it does but one virtue, stimulant to vegetation costs the Louisiana planter from $20 to $55 per ton, while lime with its general tendency towards the enrichment of soil, would cost about $5 or $6 per ton, according to the facilities of transportation. It would therefore be safe to suppose that lime being worth one-fourth as much as the fertilizer now used, and not thinking it unreasonable to suppose that its consumption would be increased at least 50 per cent. of what is now used in the way of nitrogenous fertilizers. This will give you an idea of the enormous tonnage it would aggregate.

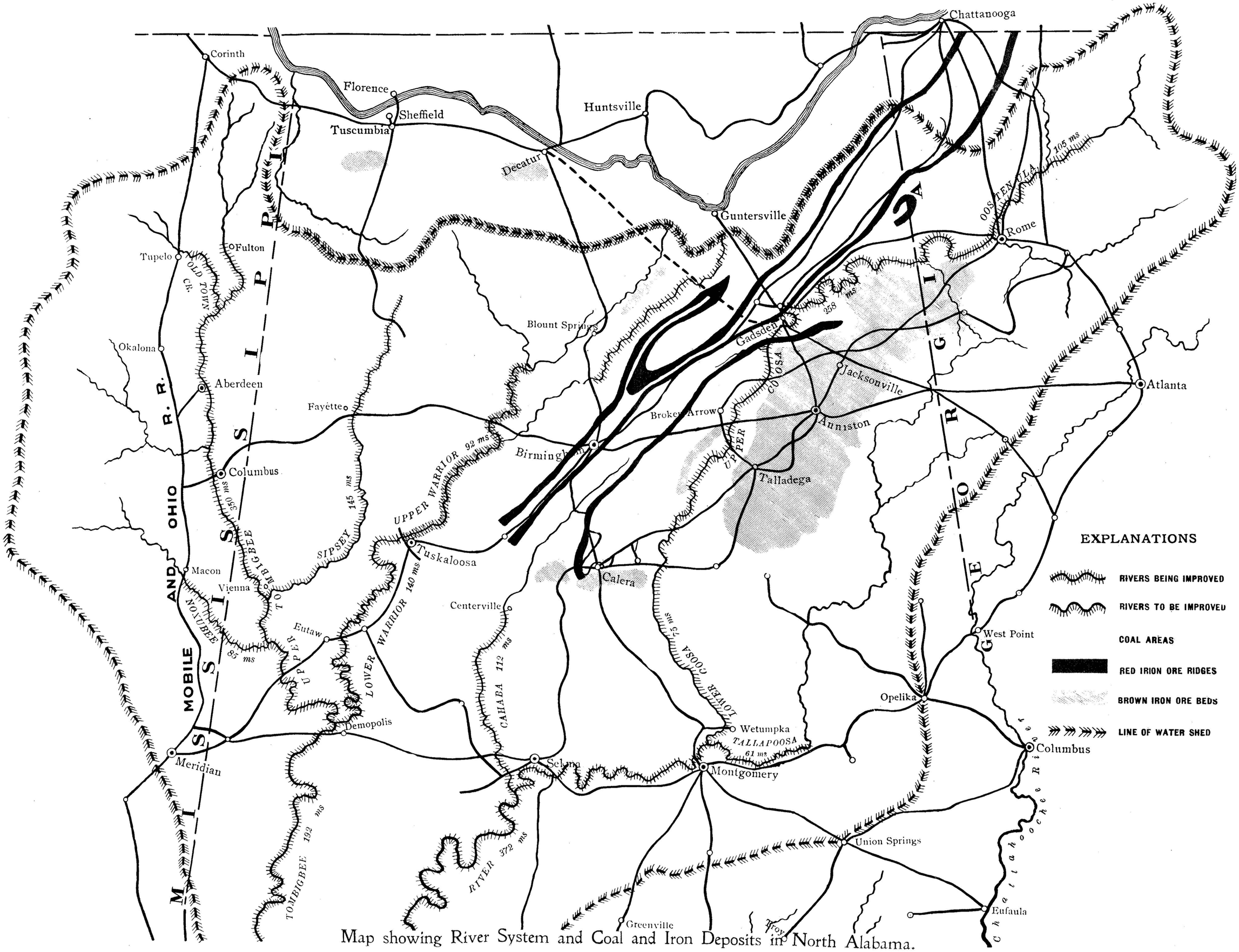
Situated as these plantations are on the banks of the Mississippi river, or on streams tributary thereto, with water navigation direct from the point of shipment to the point of consumption without rehandling, to say nothing of the cheapness in this character of transportation; this fact alone will almost solve the problem of cheap lime to Louisiana planters.

Louisiana could use at the present time nearly one-half million tons of lime per annum were it possible to get a $2.50 rate per ton through to the plantations. With water transportation this could be done, which would mean $1,250,000 in freight alone, to say nothing of the lime trade already developed for the manufacture of sugar, which aggregates at least 200,000 barrels that now costs on an average of 50 cents per barrel freight to plantation points, which includes the prorate of the different

railroads and connecting steamboat lines at the city of New Orleans.

In other words, the Coosa valley, with its inexhaustible supply of the purest and highest carbon rock in the United States, with water transportation through to the Gulf streams would make it for the lime industry what the state of Alabama is destined to be in the iron world.

Another fact of interest that should not be lost sight of is, that water transportation through to the sugar fields of Louisiana would develope a volume of return freight, in the way of cargoes of molasses and sugar, for the redistribution to the Middle Southern States that could be made equal to the entire amount of tonnage that would be handled throughout the Coosa valley to the Gulf. These are but a few interesting facts that I mention, as I feel that volumes could be written upon the possible future development of Alabama's and Louisiana's greatest industry, by the development of water transportation between the two great countries.



Map showing River System and Coal and Iron Deposits in North Alabama.