

PROF. TUOMEY'S REPORT

OF THE

SURVEY OF A PORTION OF THE ROUTE

OF THE

TUSCALOOSA PLANK ROAD,

TOGETHER WITH

THE ACT TO INCORPORATE THE

TUSCALOOSA PLANK ROAD COMPANY.

Tuscaloosa :

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1850.

## AN ACT,

### *To incorporate the Tuscaloosa Plank Road Company.*

SEC. 1.—*Be it enacted by the Senate and House of Representatives of the State of Alabama, in General Assembly convened,* That Landon C. Garland, Peter Martin, John J. Ormond, Benjamin Whitfield, Basil Manly, Ninian Tannahill, James McAdory, Octavius Spencer, Willis Banks, James H. Dearing, Elisha McMath, Newton L. Whitfield, James Guild, Samuel Tarrant, Robert Hiff, William S. Mudd, be and they are hereby appointed Commissioners, to open subscriptions for the Capital Stock of the Tuscaloosa Plank Road Company, at such times and places, as they or any five of their number shall think necessary.

SEC. 2. *Be it further enacted,* That the Capital Stock of said Company shall be One Hundred Thousand Dollars, in shares of twenty-five dollars each, but may be increased one third more, if, in the opinion of said Company, such increase is desirable.

SEC. 3.—*Be it further enacted,* That the said road shall be constructed from the city of Tuscaloosa, and proceed in an eastwardly direction, through the coal and iron region, and may extend to the town of Elyton, or to some convenient point on the Cahawba River, commencing at the city of Tuscaloosa, and pursuing such route as may be considered best; and the said Company shall have power to make such branch, or collateral roads, connected with the main road as may be considered necessary.

SEC. 4.—*Be it further enacted,* That as soon as twenty thousand dollars shall have been subscribed to the Capital Stock of said Company, the subscribers of said stock, and all who shall thereafter subscribe, their assigns and successors shall be and they are hereby incorporated by the name and style of the Tuscaloosa Plank Road Company; and shall have perpetual succession; and by that name shall sue and be sued, and be capable in law, of buying, selling, holding and conveying real and personal estate, so far as may be necessary and proper, to carry into effect the purpose and design of said corporation.

SEC. 5.—*Be it further enacted,* That as soon as twenty thousand dollars shall have been subscribed, the said Commissioners shall call a general meeting of the subscribers, at such time and place as they shall appoint, and at such meeting the said subscribers, or a majority of them in value, shall elect nine directors, a majority of whom shall constitute a quorum to transact business—to manage the affairs of said Company; and the said Commissioners, or any three of them shall be judges of the first election. The Directors thus chosen shall elect a President of said Company, and allow him such compensation as they may think proper, and in all elections each stockholder shall be allowed one vote for each share held by him, and may vote by Proxy.

SEC. 6.—*Be it further enacted,* That the President and Directors of said Company shall be annually chosen by the stockholders thereof; and if any vacancy shall occur, by death, or otherwise said vacancy shall be filled by the directory; but the President and Directors shall hold their office until their successors are chosen and shall have power to call meetings of the stockholders at any time, and shall call such meeting whenever a stockholder or stockholders, representing two hundred shares of stock shall in writing, require such a call to be made; and a majority of all the stockholders in value of said company, shall have power to remove the President or Directors, and fill the vacancy thus created.

SEC. 7.—*Be it further enacted,* That the President and Directors may appoint all such officers, engineers, agents, or servants, as they may deem necessary to carry on the business of said company, and may dismiss them at pleasure, and

They shall have power to pass all such by-laws as they may think necessary and proper to carry into effect the object of this act; but no by-law shall be passed contrary to the laws of this State or of the United States. They are hereby empowered to borrow money to carry into effect the object of this act, to issue certificates of other evidences of such law, and to pledge the property of said Company for the payment of the same.

Sec. 8.—*Be it further enacted*, That the President and Directors shall have power to require the stockholders of said Company to pay such installments on their respective shares of stock in said company at such times as they think the interest of said company requires, giving twenty days notice, by advertisement in a newspaper published in Tuscaloosa, of such call, and upon the failure or refusal of any stockholder to pay pursuant thereto, may upon giving thirty days notice, proceed to sell said stock at public sale to the highest bidder, who shall thereby become invested with the title of the delinquent stockholder; and if the said stock should sell for less than the amount due therein, such delinquent stockholder shall be liable to the company for such deficiency.

Sec. 9.—*Be it further enacted*, That upon the failure of any Stockholder to pay any installment, called for as aforesaid, or for any balance due on a public sale of stock as aforesaid, the said President and Directors may move the circuit or county court of Tuscaloosa, for judgment at the term of which such motion is made, the judgment so rendered shall be a lien on the real property of such stockholder, thirty days notice in writing being given him of said motion. Said motion shall be issued by the President of the Board, and may be served by the Sheriff, who shall be entitled to one dollar for serving the same, to be taxed in the bill of costs; and upon such judgment, execution shall be issued as in other cases.

Sec. 10.—*Be it further enacted*, That the President and Directors of said company, are hereby authorized to contract for and receive conveyances of lands, stone, timber and wood, or of any other material necessary in the construction of said road; and when the owners and the directors cannot agree upon the price, or when the owner is an infant, non-resident, or non *compus mentis*, upon the application of the President and Directors, the Sheriff of the county in which the property is situated, shall summon a jury of seven disinterested persons, a majority of whom shall upon their oaths, to be administered by the Sheriff, assess the damages, if any to which the owner is entitled, and render their verdict in writing, which on the application of said President and Directors shall by the Clerk of the County Court where said property is situated be entered of record, and operate in law, a conveyance of said property to said company, on its paying or offering to pay the damages if any which are assessed. The Sheriff and each of the jurors shall be entitled to one dollar per day, and the clerk, one dollar for making such record, which shall be paid by said company. But either party dissatisfied with the verdict of the jury may appeal to the next term of the Circuit Court of the county on entering into bond with security before the Clerk of the County Court in such sum as he may require, with condition to prosecute the appeal with effect, and to pay all costs and damages which may be awarded against him: but the construction of said road shall not be delayed or suspended, pending such appeal.

Sec. 11.—*Be it further enacted*, That if any person shall wilfully and maliciously injure, or in any manner, or in any way, obstruct said road, he shall forfeit and pay treble damages to the President and Directors of said Company, for any injury sustained by said company in consequence thereof, to be sued for and recovered, in any Court having jurisdiction thereof. And for any such wilful injury or obstruction, the person so offending shall be guilty of a misdemeanor, and subject to indictment; and on conviction shall be imprisoned by the Court, not less than one nor more than six months.

Sec. 12.—*Be it further enacted*, That payment for subscriptions to stock may be made in labor, materials, provisions, or in any other thing necessary to the construction of said road; which the board of directors in their discretion, may deem proper to accept.

Sec. 13.—*Be it further enacted*, That the said President and Directors, shall keep a minute of all their proceedings, and shall enter in well bound books to be kept for that purpose, all contracts and other acts of said directors, which shall be always open to the inspection of any stockholder of said company. It shall

also be their duty at the annual meeting of the stockholders to make a full report of all their proceedings, and of the finances and present condition of the company.

Sec. 14.—*Be it further enacted*, That the stock of said company shall be considered in law, personal estate, and as such shall upon the death of any stockholder vest in his personal representatives, unless by his last will be should bequeath it, and shall also be subject to levy and sale by execution at law.

Sec. 15.—*Be it further enacted*, That after the completion of said road, or any section or part thereof, the said President and Directors may lay and collect tolls from all persons, property, merchandise and other commodity transported thereon; Provided, that nothing contained in this act shall be so construed as to authorize said company to exercise the powers of a banking company, or to issue any description of paper or evidence of debt, intended to circulate as money.

Sec. 16.—*Be it further enacted*, That the said company shall issue certificates of stock to the stockholders of said company signed by the President, which shall be assignable at the pleasure of the holder, according to such modes as shall be provided by the by-laws of the company; but no stock shall be assignable, or vest any interest in the assignee, until all calls made by the company previous to such transfer are paid.

Sec. 17.—*Be it further enacted*, That any association of persons may continue the same Plank Road to any point beyond its termination or make collateral roads intersecting the main stem, by the name and style of the Tuscaloosa Plank Road Company, Number Two, Three, &c., in the order in which they are built, and by such name and style shall be, in law a corporate body, with all the powers and privileges hereby conferred on the Tuscaloosa Plank Road Company, and subject to all the rules and regulations prescribed for the Tuscaloosa Plank Road Company, but shall not be identified with it, but by the consent of the stockholders thereof.

L. P. WALKER, Speaker of the House of Representatives.  
DENNIS DENT, President of the Senate.

Approved, December 14, 1849.  
R. CHARLES.

## REPORT.

To the Hon. Peter Martin,

Chairman of the Committee.

Sir:

You are already informed of the circumstances which caused the suspension of the survey, entrusted to my charge, before its completion, and I need not therefore, allude to them here. The portion of the line surveyed is acknowledged by those acquainted with the country between Tuscaloosa and Jone's valley, to be, by far, the most broken on the whole route, and I know from observation that the Hurricane is the most difficult water course to be crossed on this side of the Tennessee river: so that the results obtained may be taken as a very high estimate from which the total cost of the road may be deduced. The improvements, of which many portions of the line admitted, were so obvious that it was not thought necessary to re-survey those portions, and I have confined myself in this report to the line actually surveyed. It is plain, therefore, that the route here presented is the very worst that need be adopted, and that every change made in the location, must tend to lessen the cost, reduce the grades or shorten the distance.

To prevent misapprehension, it is proper to remark that this survey was undertaken as a reconnoissance, to ascertain the practicability of the route, to serve as a basis for future operations, and not with the object of finally locating the road, indeed it is quite certain that many portions of it will not be adopted at all, and it is probable that much of the rest may be altered. Our friends along the line then, who know of many better routes, may yet have them fairly tested.

I have heard it suggested, that the road may, one day, be converted into a Rail Road; in relation to this, I have only to observe that the survey was conducted without any reference to such an event. The high velocities, characteristic of Rail Roads, require straight lines, and gentle curves, conditions that can, frequently, only be obtained with the expense of heavy embankments and deep excavations. Besides this, the great cost of construction of a Rail Road may justify a considerable expense in grading, in order to shorten the distance—circumstances obviously incompatible with the objects contemplated in the construction of roads for ordinary vehicles. Nevertheless, incidentally, it has so happened, that parts of the route surveyed would leave but little to be desired as a Rail Road location.

The line which is made the basis of this report, after passing through the principal business street, leaves town by the

Huntsville road. For the first mile and a half the surface is much broken, and will involve a considerable amount of embankment, compared with the rest of the route. This would be avoided by taking the street parallel with the Huntsville road, to the south. The road might still pass through the business street, and turn south through Margin Street. It would then, only be necessary to remove the bridge, across the ravine near town, a few yards down stream, so as to bring it into the centre of the road, and to raise it four feet higher. The difference in cost between the two routes will amount to about \$600, so that the question resolves itself into one of mere expense, on the one side, and the improvement of one of the principal approaches to the city on the other—considerations that will be duly weighed by our citizens before the road is finally located.

The terrace upon which Tuscaloosa stands is bounded on the east by a ridge which extends from the broken surface of the valley of the Warrior to a point not far south of the Huntsville road. The most direct route crosses this ridge towards the north, but after one or two experimental lines were traced, it was abandoned for one which leaves the ridge entirely to the left. The line there takes a long trough-like depression—extending to the summit of the water-shed between the Warrior and Hurricane on the North and Cribb's creek on the south. Throughout this distance the line skims along the surface at an easy grade of 1 in 86.

Should it be found practicable, on a careful examination, to cross Brown's Mill branch at this point (the end of Forrester's old field) besides shortening the distance, it would very much reduce the grade to the creek, and this would be the more important as the reduction would be in favor of the descending or heavy trade.

At station 118 the line deflects to the right, in order to pass the broken surface of the mill branch, and soon strikes the old Huntsville road; after passing back of Brown's house it begins the descent to the creek near the meeting-house. The elevation of this point above Tuscaloosa, is 192 feet, and 267 above Hurricane where the line crosses it. From the Meeting-house the line descends obliquely to a branch flowing into the creek. The sandstone of the coal measures makes its appearance here, for the first time, on the line; the hill side on the branch is inclined at an angle of 45° or more; and nearer the creek projecting spurs of rock alternating with deep ravines render this portion of the line rough, and for the last 1500 feet, really difficult.

At station 184 the line crosses the creek 54 feet above its bed and reaches the opposite bank, in a distance of 300 feet at the same level. This is about 7 miles from Tuscaloosa and, below Randolph's mill.

It is now slightly developed towards the east, in order to rise from the valley of the creek, to a ridge that leads out to Riley's at the 9 mile post. The line upon the ridge admits but of little improvement as the latter is quite narrow. The elevation at Riley's is 249 feet, from which the line descends rather abruptly to the public road, which it follows for a short distance. From this point to the meeting-house, beyond the 10 mile post, it will be greatly improved by being thrown to the left. The rough and broken ground, between Green's and the meeting-house, commences here. The line leaves the public road at the 10 mile post, and the descent to the branch is rather steep; yet compared with the general surface of the country, between this and Snyder's, it must be deemed exceedingly favorable.

From Snyder's, to Muddy branch, there is but little choice of ground; the line therefore winds, to the right and left, among the abrupt and rounded hills that stud the surface. In the development of the line here we lost what we had already gained in distance upon the public road. At the Pottery the line follows a slight depression between two hills, which passes in front of Wallace's, where it leaves the public road to avoid the rough ground near Pitcher's. The elevation here is 371 feet; and at the 17 mile post the line after all its deviations, is only 17.5 miles in length. The greatest elevation is 403 feet, and the length of the portion surveyed is 18 1/2 miles. —Taken altogether, no one, who is only acquainted with the country, by passing over the public road, could have anticipated a route so favorable. The accompanying profile will convey a clearer idea of the surface and general character of the ground than any verbal description however lengthened.

**GRADES.**

The most favorable grades range between 1 in 125 and 1 in 300. Such gentle slopes as these, at the same time that they favor the escape of the surface water, do not impart to it sufficient velocity to injure the road-bed. One sixth of the distance surveyed has such grades as these; on one half of it the grade is between 1 in 50 and 1 in 125, and the grade in 5 miles varies between 1 in 125 and level. About 1 mile has a grade as steep as 1 in 22 to 1 in 25 and even this may be reduced by a slight alteration, or development of the line.

The distance from Tuscaloosa to the summit of the ridge, on the South side of Hurricane, is 5 1/2 miles, and the elevation 192 feet which is overcome by grades between 1 in 50 and 1 in 200 with the exception of a few short intervals near town. From the ridge to the Bluff on the creek the distance is about 1 1/2 miles and the depression 216 feet. The descent is commenced with a grade of 1 in 400, which is succeeded by one of 1 in 50. The next 2000 feet has a grade

of 1 in 22, just as the line descends to the branch, which may be obviated by striking the latter higher up. The remainder of the line reaches the creek with a slope of 1 in 54. The bridge across the creek will be 300 feet in length, and its elevation above the bed of the stream 54 feet. On the north side of the valley the summit level is 173 feet above the Bluff. The first 1000 feet from the creek rises with a grade of 1 in 24 which will also be reduced in the location of the road. The rest of the ascent from the valley to Riley's is accomplished with a grade between 1 in 50 and 1 in 70.

From the summit at Riley's, the descent is 1 in 25, but only for a distance of 600 feet. On the remainder of the line the grades are gentle with the exception of a few short slopes which will appear on the profile.

I am satisfied, and with a little more time devoted to the field work, I could have demonstrated, that the maximum grade may safely be set at 1 in 50, without lengthening the distance, or materially increasing the cost.

**SUMMARY OF GRADES.**

RATE.	DIST. IN MILES IN FAVOR OF THE HEAVY TRADE.		DIST. IN MILES AGAINST THE HEAVY TRADE.	
1 in 22 to 1 in 25	0.7		0.6	
1 in 25 to 1 in 50	1.6		0.8	
1 in 50 to 1 in 125	7.0		2.0	
1 in 125 to level	2.3		2.0	
Level 1.3 miles.				

**GRADING.**

The superficial beds along the route, with the exception of the sandstone near the creek are composed of sandy loam, gravel &c., materials that are easily excavated, at the same time that they form an excellent road-bed. On nearly every portion of the route the grading may be reduced to the minimum by altering the line. The cost of superstructure, is set down in the report of the Committee on the establishment of a Plank Road from Tuscaloosa to Rroups' Valley, at \$564 per mile; this gives the limit of the cost of extension of distance to save grading, taking always into account the loss of time, &c., arising from such extension.

It is not easy to estimate exactly the cost of grading on the south side of Hurricane until the road is located, I have therefore placed in the estimate \$1,500 as sufficient to cover

the expense of the last 2,000 feet, which is the only difficult portion.

There is so little clearing and grubbing to be done, that it may be omitted as an item of expense.

The cost of grading will stand thus: for a road bed 20 feet wide:

Cubic yards excavation,	19,000
“ “ embankment,	77,000
	<hr/>
Total,	96,000 @ 10 cts.
	\$9,600
Rock ex. at Hurricane,	1,500

\$11,100 or nearly \$600

per mile. This estimate is higher than that already presented; yet not very much higher, considering that this is the most difficult ground between Tuscaloosa and Rouns' Valley.

Upon the cost of superstructure I have, of course, nothing to offer, the estimate placed before you in the report of the Committee of fifteen, was based upon the best information that could be procured, in relation both to the price of materials, and cost of labor.

After the lucid and able manner in which the objects, the advantages, and the profits of your road have been pointed out, in the report referred to, it would be an idle waste of time to add a single word. Indeed, with 4,000 square miles of productive coal fields before you, without an outlet, excepting the precarious one afforded by the river in its present state, it is difficult to see what additional inducement for the construction of your road could be offered.

A single company in Virginia (the Clover Hill Mining Co.) have built a Rail Road 22 miles in length at an expense of \$100,000, with the sole object of transporting their coal to a navigable point on James River; and it is probable that the quantity, carried over the road, amounts annually to 2,000,000 bushels. One thing is certain, whether the citizens of Tuscaloosa are true to their own interests or not, that the valley, which this road is intended to connect with the Warrior, is marked by nature as a part of the great thoroughfare between the Tennessee valley and the Gulf of Mexico. And whatever the superior energy, and enterprise of neighboring States may do to divert trade from that, its proper channel, it will one day, as certainly return to it, as that our rivers flow to the Ocean by the shortest practicable course.

In conclusion I have to express my thanks to the gentlemen who assisted in the field work, as well as for the civilities we received from our citizens on the line.

M. TUOMEY.

University of Ala., Jan. 1850.