Office Monongapela Navigation 60 } Pittsburg Penn? November 24. 1857 }

I, James H. Moorhead, President of the Mon= onganela Savigation Company, do herely certify to all whom it may concern, that W. Wilnor Roberts Equire has been long personally known to me as a Givil Engineer and Contractor on public Improvements in the United States, and as such has been eminently skillful and successful. I hat he was Chief Engineer of the Mon: ongahela Savigation Company from the commence: ment of that Slack water Improvement in the year 1837 and for several years thereafter, and devised and carried into successful execution the construction of Locks and Dams on the Monongahela River, which were much the largest in the United States. That the work has since been extended without material variction from the original plans of Ur Roberts. 4 the strength and sufficiency of the works attest the skill and ability of their projector. I commend him as an Engineer of great experience and as a gentleman of high standing in this Community .-Me Woorhead Preste

W: Balewell Secretary.

did not come he whose from and you can une it or not.

Canal Commissioners Office Harrisburg (Tenna) December 1 1857

W. Milner Roberts Esq. is well known in this State as an Engineer of the highest class. He occupied for many years the position of a Principal Engineer on the most important works of the Commonwealth, and discharged his duties to the entire satisfaction of the public officers. As a Contractor he has, since he left the service of the State. been engaged in some very important works of internal improvement. Fis experience as an Engineer and Contractor are such as warrants us in recommending him cheer fully to the confidence of all who may require tatent, experience, and energy, in the prosecution of rail-roads or banals

N.S. Mott

George Color

Thomas Selvilson

Recommendating Selle; from the Canal Commission the State of Consighania Sec 1.185.

W. Milmer Roberts

Whereas it is believed, That Congress will make an appropriation at its present session for the con-Struction of a Ship Canal at the Sault de St Marie for the purpose of Connecting Takes Huron and Superior and wherear it has been suggested, in case of such an appropriation, the Secretary of Mar would appoint Some distinguished Civil Engineer, of hied Aprenence in the Construction of Canals, to take charge of the work Muefore Kedolved, at the unanimous opinion of Ethis Board, that W. Milnor Moberty, Esy., he recommended to the be partment for that important post. The Board is of opinion that no better or more acceptable appointment could be made. Mr. Roberts is a gentleman of polished and conciliation addressof brilliant talents - of distinguished reputation - of long-tried experience, and of unsullied integrity; he has been all his life-time engaged in the duties of his profession and in making Canals. He grew up from a boy with the improvements of terresylvania, and for

mary years held the appointment of one of the Chief Engineers. He was also Some years Chief Engineer of the Monongahela Varigation Companywas the Chief Engineer of this Comfram from its organization to the Completion of Their Canal and is at present Chief Engineer of the Sandy and Beaver Canal in the State of Ohis: This Board bears the fullest testimony to the ability, fidelity and Luccess with which he discharged all The important duties devolving upon him while in this employ - and unreservedly expresses the opinion that he is eminently qualified for the appointment in question. Passed. "On motion, Resolved, That the Secretary forward a copy of the above preamble and resolution duly certified to the Seculary of Mar, and also to Mr. Roberts at New Liston.

Office of the Eine Canal Company. Ein Banal Company S. The do herely certify that the above and anniced is a true and correct copy of the Record of the Circ Canal Company, of the date of Marca 16th A. D. 1846. In Testimony whereof we have hereunts fet our hands, and caused the Seal of the Company To be affixed, this melita day of November in the year of our Ford One Thousand Eight Hundred and fifty Leven. That we Reed Free A. H. Caughy, Juy.

Ene Canal Co

WOS FRANCISCUS PATRITIUS KENRICK,





Archiepiscopus Paltimorensis,

(mnibus quorum interest notum faciones et testamer Gulielmen Milnor Roberts, civem Americanum, familiae spectabilis, et famae illibatae, scientia et peritia insignem, quem ad regiones meridionales profecturum, plurimum commendamus, ut si qua in re consilio operave anica indiquerit, adjuvetur. In quorum fidem has litteras dedinus Saltimori die VII Novembris A.D. MDCCCLVII.

+ Franciscus Patrituis Arch. Ball.

Thomas Toley See.

Allegheny Valley Rail Road Office, Pittsburgh, P. Nov. 101857. My indiniqued President Secretary of the alleghery Valley Rail-wad bompany, under the Seal of the Said Company respectfully buty. That wo have an intimate Knowledge of the beaux W. Million Roberts Eng. bivil Engine That during the construction of the allighery bally Kail road, he was the blief Engineer, vin that capacity, ably, Satisfactorily & Houstly performed the duties of the Office. - That we have known him by reputation as an Engineer on Various other public Works, buch as banals, Rail rods Blackwater. navigation, - and that the report of his former Em-- players fully coincides with our knowledge of his conduct whilst in the suplay of our bompany. That we have heard of his success pureviance? ability as a boutractor & do not doubt the fact from our knowledge of his personal worth Halents as an active industrious Bhilfull business man. Muff Johnston das bibtow deed 3 Par avrille

Leon

St. Louis and Fron Mountain Railroad.
Division,
Section),
William Me Walts Charles Matts AM Million Roberts CONTRACTORS FOR
The A Souis of Iron Mountain Railroad from the City of
A Louis to The Pilot Knob
Articles of Agreement, made and concluded this Twenty sightle day of February 1854
between WMatts Contracted M. M. Roberts of the one part, and the ST. LOUIS AND IRON MOUNTAIN RAILROAD
COMPANY, being a Company duly incorporated by the Legislature of the State of Missouri, by Juther Mennett President
of the other part, whereby it is agreed as follows:
The said Will Watts be Matts & Me Contractor & hereby promise and agree to perform in a thorough workman-
like manner, agreeably to the directions and satisfaction of the Engineer of said Company, and subject to all the clauses of the general specifications in this
contract, and subject also to all the clauses of the specifications for Graceation Masony & Track Laying attached to and forming part
of this contract, the following work of Grubbing & Clearing Jeneing grading Masony Jennishing Crops I
I sub-sills, Laying Frack & ballasting the same, when required complete
on the entire length of the road between the City of of Louis & The
Pilot Brut Mountain, about eighty seven miles

GENERAL SPECIFICATIONS.

1. The work on each section of this contract is hereby declared to be subject to all the clauses of this contract, clause 2 excepted, the same as if a separate contract had been drawn for each section. The extent of each section is defined on the plans and profiles of the work; and any modification of any section in consequence of changes of location or otherwise, shall be defined by the Engineer of the Company.

Clause 2 of this contract has reference to its entire extent, taken as one whole, and not to the sections individually.

All directions, explanations, superintendence, or instructions, spoken of or required under this contract, refer to, and will be given by, the Engineer of the Company, or his authorized agents; the contractor may at any time require such instructions to be stated in writing. The Engineer may at any time make such changes in the amounts of any of the descriptions of work to be done, or in the character or description of any materials to be used, as the interest of the work may, in his opinion, require; a fair allowance being made by him, on either side, for such changes, where provision is not made in one or other of the clauses of this contract for the particular case. And to prevent all disputes and misunderstandings, it is mutually agreed and covenanted between the parties, that the Chief Engineer shall be the umpire between the parties in all matters in dispute under this contract; and when any controversy arises, it shall be referred to him, and his decision in writing shall be binding on the parties to this contract, without appeal therefrom. Whenever the word Engineer is mentioned, it is understood to be the Engineer for the time being.

2. Until the Company shall have procured the right of way through all the lands applicable to this contract, the contractor shall commence work, or make arrangements for commencing work, whether of graduation, musonry, or otherwise, on such grounds only as the Engineer shall designate.

Through any act on part of the company in colotion to the right of way or otherwise.

The contractor, by reason of the Company not procuring the title to lands in season shall not have any claim for damage or detention, but he shall be entitled to an extension of the time on each part of the work which he was prepared to commence, equal to the time lost from and after the day on which he was so prepared. But the contractor must notify the Engineer in writing in all such cases, fifteen days beforehand, when and where he desires to commence work other than where the right of way has been procured; otherwise it shall be assumed that he was not reacy, and in such case no allowance will be made him; and his alleged preparation to commence cannot date before said notification.

- 3. All materials used under this contract, of whatever description, and all workmanship under this contract, shall at all times be liable to inspection by the Engineer, or by such person or persons as he may appoint.
- 4. The final measurements of all work under this contract shall be made under the direction of the Engineer of the Company, who shall determine on its quantity and quality, and whether it satisfies the requirements of this contract.
- 5. The contractor shall not be at liberty to sub-let any part of the work without the consent of the Fugineer; to sub-contract, however, shall relieve the contractor of his liabilities under this contract, should the sub-contractor fail to perform the work undertaken by him. All payments made to any sub-contractor, under written authority from the first party to this contract, shall be chargeable to said first party; and the sub-contractor's receipt shall, in such case, be considered sufficient evidence of such payment.
- 6. The contractor shall employ competent foremen and workmen and experienced mechanics; and he shall immediately discharge, whenever required to do so by the Engineer, any men considered by the Engineer to be incompetent or disorderly, or disposed to foment discontent or mischief on the work.
- 7. The contractor shall not sell, or allow to be sold, within the limits of his work, any spirituous liquors, nor allow any such to be sold upon the work; and he will do all in his power to assist the officers of the corporation in maintaining such regulations as shall conduce to the orderly and peaceable progress of all parts of the work, and as shall tend to prevent all unnecessary interference with the rights, privileges, and property of persons in the vicinity of said railroad, and he shall instruct his foremen and agents accordingly.
- 8. The contractor shall not be considered to be making sufficient progress with his work, unless the work done by him, monthly, after the first /25 days shall represent its full sectional proportion of the whole work to be done within the time then at his disposal; the first days after the date of his contract, will be considered as due to propagation. And should the contractor at any time, after /25 days from the days after the date of his contract, not be found to proceed with all or any sections of his work in such manner as to secure, in the opinion of the Engineer, the entire completion of the work on the said section or sections within the time allowed by his contract, the Engineer may so notify him; and should he not then, within days from the date of the said communication, make the necessary exertions and arrangements to compensate, in the opinion of the Engineer, for previous negligence or inactivity, the Engineer may then in writing declare the contract, or any particular part of it, void, and it shall be so considered by both parties to the extent declared by the Engineer. It being particularly understood that any subse-

87 miles.

Engineer.

Right of Way.

Inspection.

Measurement.

Sub-Contract.

Workmen.

Liquor.

Failure.

ST. LOUIS AND IRON MOUNTAIN RAILROAD—CONTRACT AND GENERAL SPECIFICATIONS.

quent recognition of a contract, or part of a contract, that may have been declared forfeited, shall not debar the Engineer, as many times as may be deemed proper, from the right to again give the days' notice, and (if necessary) subsequent notice of forfeiture as provided above; and it is further distinctly understood, that in case of notice having been given by the Engineer to increase force, as provided above, the Engineer may not only at the end of days, but at any time thereafter during the progress of contract. without further notice, declare the contract, or any part of it, forfeited; and it shall be so considered by both parties, unless the Engineer shall have, in writing, endorsed said days' notice as cancelled.

Should the time given in the contract for completion arrive and the work under the contract not be then completed, the contract shall be considered void, without any notice whatever, but the Engineer may, in writing, notify the first party to continue with the work, and the first party shall be bound so to do; but the Company shall not be bound for the payment for any work done after the contract has expired, unless the notice for continuation has been, in writing, given by the Engineer. Should the contractor not be performing his work according to the specifications and directions of the Engineer, and should he, after ten days notice from the Engineer, still persist in disregarding such specifications and instructions, then the Engineer may declare this contract forfeited, and it shall be so considered by both parties. except as herein after provided

In case of failure or forfeiture of contract, the Engineer shall be at liberty to employ other persons to fulfil the contract and finish all or any parts of the work, of graduation, masonry or otherwise, on said section or sections, and the contractor shall be liable for any damages or for any extra expenses caused by his neglect to fulfil his engagement. to the extent of the fifteen has sent retained

And it is hereby especially covenanted and agreed by the said contractor, that he will immediately, on receiving notice from the Engineer in writing, that he, the said Engineer, has declared the whole or any part of the work of this contract abandoned, as herein provided for, give up and surrender to the Company's Engineer, or other authorized agent, quiet and peaceable possession of all and every part of the Company's land and roadway, and all other things or materials in any way pertaining thereto, on which the Company may have made advances; and also such shantees, stables, derricks or fixtures as the Engineer may desire to retain, a fair valuation being allowed by the Engineer for such tools and fixtures, to be credited to the contractor's account with the Company.

9. In case of failure by contractor to complete this contract, or of forfeiture as provided above by Engineer, the Company shall be exhonerated from all further obligation and liabilities arising under this contract, and the reserved per centage of fifteen per cent., upon any work done by the contractor, shall be forfeited to the Company as a penalty for such failure, and may be retained forever by said Company; and ne money which may be due the contractor, either for work done, or for tools, shantees, or other fixtures, over and above the per centage, shall be paid until the work for which this contract is made shell be completed; and should the employment of other persons increase the cost of the work, such money shell be applied toward that additional cost.

Provided, that this penalty shall not be enforced excepting only where the contract for any section or sections is declared by the Engineer to be forfeited and annulled, and where the operation of the following exception is not admitted, viz:-

10. Should there be any particular piece or pieces of work included in this contract which, by the neglect of the contractor to complete it or them, will interfere, in the opinion of the Engineer, with the due and timely advancement and completion of other work depending thereupon,—and should the contractor, with this or these exceptions, be carrying on the other and larger remainder of his work with sufficient attention and rapidity,—the Engineer may at any time, after giving the contractor, and written notice at the end of said 30 days, place additional force with such foremen and shantees as the Engineer may deem proper; or the Engineer may withdraw from his contract the particular piece or pieces of work alluded to, and employ others to finish such, and any damage resulting thence to the Company shall be charged to and paid by the contractor that partial interference with the purpose of avoiding, if possible, its entire forfeiture, shall be optional on the part of the Engineer. optional on the part of the Engineer.

11. It is distinctly understood that the contractor can only claim from the Company pay for work as it has so far been satisfactorily placed on the particular piece or point, to be paid for at the contract prices; but the Company may, at the discretion of the Engineer, make advances on materials, such as rock, lumber, building-stone, iron, and other material, delivered for use on the work. But, in case of any advance, all such materials are hereby declared to become the property of said Company. It being further understood, that all materials on which advance may have been made, as being in charge of contractor, are entirely at his risk, and the Company are in no way liable for their destruction by fire, flood, or loss, until the work is completed and accepted.

12. The contractor shall render an account monthly, through the proper superintending Engineer, of any extra work which he may have been authorized to do; and, to prevent disputes hereafter, it is hereby understood that no bills for extra work will be allowed without written evidence of the work having been properly authorized, and of the bills having been examined by the superintending Engineer.

13. And it is hereby understood, that, with the exception of such instructions and alterations as the Engineer, under the provisions of this contract, is entitled to make, the terms and conditions of this contract, or any one of them, cannot be dispensed with, or rendered in any sense null and void, without the written consent of the President of the Company attached or endorsed on this contract, and specifying what modifications may have been agreed upon.

14. The whole work herein specified and contracted for shall be completed in all its parts on or before the following dates, viz: 20 Big Rivers by 184

of July 1836 of to Pilot, Anoly by 1st December 1856 Provided the Company shall furnish the Iron rails Chairs & Spiles Six months before said dates for the purpose of monthly estimates the lengineers may fix such prices on the different parts of the work as shall seem to him fairly in proportion to the value of the whole work to be done It is understood that the prices for Aad Pace I extraordinary have Rock, are to be determined from time to time by the Engineer in charge of the work, but should said price a price be decreed inadequate as a fair compensation in the Spirit & meaning of this Contract, Said Contractors may designate some disinterested Chief ingineers who shall confer with the Company; Engineer I if they cannot agree upon a frie or prices, Said Engineers shall choose a third disinterested Civil Engineer of good reputation of decision of a majerity of said refered shall be binding repor the parties to this Contract, and in like mounin report the return of the final estimate of the work or any pack, under this Contract in case of diffraction on the hart of the contractors, a similar reference shall be made to decision of the majority of suid Enginees. shall be beinding upon the parties Earch of the parties to pay one half of the expense of such reference or references It is understood that in case the present Consulting Engineer should die or be accorded, or of from any cause a new head to the Engineer department should be required the appointment to fill the reaconcy is to be made either by agreement between the parties or by visinterested persons to be agreed whow by the parties to this contract Such disintensled pursues to be origineers in high standing

15. On condition of the faithful fulfilment of the above contract and specifications in all its parts, as explained in the accompanying specifications, the said St. Louis and Iron Mountain Railroad Company, by Cuther M Rennett President hereby promise and agree that they shall and will, for doing and performing the work aforesaid, pay or cause to be paid to Said Well Watts be Matte of Mell Roberts

the said contractors theirs, executors, or administrators, the following prices, for work so performed, by following schedules:-

Penalty.

Withdrawal of Work.

Advances.

Extra Work.

Time of Finish-

	ST. LOUIS AND IRON MOUNTAIN RAILROAD—CONTRACT AND GENERAL SPECIFICATIONS.
-100/4	SCH FDULE OF PRICES.
Prices.	1. Earth Excavated, with haul of 100 feet
_ 1	2. Rock Excavated "
ento per	3. Haul, per 100 feet for all beyond first hundred feet
He.	4. Grubbing and Clearing, where any per acre, Tifty a ollars
12 cents.	5. Gravel Ballasting laid, all haul included
\$1.00	C. Broken Stone, Ballasting laid, haul includedper cub. yard, One aslars
	Spaul Ballasting reserved from Rock, haul included,
	7. White Oak Beams for open Culverts, and Cattle-guards per thousand feet, Twenty five dollars
	8. White Oak Timber laid in Foundationsper thousand square feet, b'd measure. Twenty fine dellass
	9. White Oak Plank laid in Foundations per thousand square feet, b'd measure, Thirty dollars
	10. Timber in Cofferdams and Centresper thousand square feet, b'd measure, Twenty fine dollars
	11. Plank in "per thousand square feet, b'd measure, Thirty dollars
	12. Piles in Foundation 25 feet long, driven 22 feet
	13. Iron Work in Foundations, Cofferdams, or Centres per lb., Twelve Cents
-	14. First Class, Bridge Masonry, in mortar,
-	15. Second Class, Rubble Masonry, in mortarper cub. yard, of itse achteris
-	16. Third Class, Dry Rubble Masonry of Culverts, Cattle-guards, &c per cub. yard, Hours dellarg
	17. Coursed Sheeting of Arches, in mortar per cub. yard. Nine dallarg
	18. Rubble Sheeting of Arches, in mortar
	19. Additional for mortar, when made wholly from Cement
	20. Cross-ties, White Oak, Post Oak, Burr Oak, Black Walnut, Red Elm per sleeper, Forty five Cents
	21. Oak Sill Plank, 9x3 per thousand square feet, b'd measure, Therty feier Cents
	22. Track laid. per mile, Five hundred of fifty collars 23. Fencing. per rod, Dwo dollars of fifty Courts
	24. Wimbe Bridging, under 12 feet span. price per lineal foot,
	12 to 30 feet span.
	S6 to 50 feet space.
	55 te 75 feet span
	68 to 100 feet epara
	105 to 150 feet pan, " "
	25. Tunnel per cub yard, Three dollars & Leventy fine centre
	16. This contract does not include every item of work above designated, but only such items or descriptions of work as have stipulated prices herein attached
	to them, together with all the contingent work included and covered by the said prices; the first party to this contract has no exclusive right of occupation of the ground or conveniences included in its extent, but is only entitled to such accommodation, not inconsistent with the necessary and timely prosecution of the other work pertinent to the completion and operation of this Railroad, as is necessary for the proper prosecution of the work herein undertaken by the said first party.
	17.—It is understood and agreed that the said shall take per cent. of
	the amount that shall become due and payable to under this contract, in stock of the St. Levis and Iron Mountain Railroad at par value.
	18. Payments, conditioned on the true and faithful performance of this contract, will be made monthly, as the work advances, at the estimate of the Engineer, reserving tiple on per cent. until the completion of the contract. in Bands of the city of the State of the
	on in Cash as stipulated between the parties on the back of this Contract
	19. The contractor, when so required, shall furnish the Engineer, at any time, with satisfactory evidence that the men employed by him under this contract have
	been paid; and if he shall fail to furnish evidence within twenty days after the first of the month, that all labor under this contract for the preceding month has been paid, then, it is mutually agreed, that the Engineer may, at his discretion, claim and receive from said Company any money in their hands due to said contractor for work
	under this contract, and apply the same to payment of labor done by said contractor up to date of such payment by Engineer; and that all money so paid shall be
	chargeable to said contractor, and the receipt of the laborers, endorsed by Engineer, shall, in such case, be considered sufficient evidence of, and voucher for, payment. To insure the payment of labor, and to protect the Company against liabilities that may be imposed on them by failure or neglect of contractor to pay the just ob-
	ligations under this contract, the Engineer may increase the per centage to be reserved to such extent as in his opinion may seem proper. But it is distinctly under-
	stood that nothing in this section shall be construed so as to obligate the said Company for any debts of said contractor, whether incurred for or during prosecution of this contract, or otherwise.
	In Testimony Whereof, The parties have hereunto set their hands and seals,
	the day of the first the first the second se
	the day and year first written. In duplicate Signed, Sealed and Delivered,
	in presence of us.
	Span of Span o
	SEAL.
	SEAL.
1	

It is renderstood & agreed between the paties that payment for work done under this Contract shall be made in Bonds of the State of Missouri. City of Statouis & County of St Louis to be taken by the Contractus at par to the amount of Seventeen hundred of fifty Thousand dollars To Wit Of City Bonds \$500.000 of County Bonds \$500.000 of State Bonds \$750.000 and in like proportion to each discription of bonds, at each payment made And whenever payment is made in said bonds, five per cent shall be added to the estimate price for the works so paid for, however, the Company may, as to any part of the work, elect to pay Cash din that Case said five per cent shall not be added. It is further understood that the Contractors may have The powers to make sales of the above named securities, with the Consent of the Company, as they come into the hands of the Company, in advance of the work to be done by them Provided that the proceeds of said sales are to be deposited in the hands of Toustees to be appointed by the Company Any loss which may be made on such sale of Bonds, if disposed of below par, is to be borne by said Contractors The each resulting from said sales when their made in advance, to be paid out to said Contractors as the work progresses, proportionally. The proceeds of Bond which shall have been fully carried spaid to said Contractors, shall belong of right to them, & are not included in said an angement, as an additional inducement for the Contractors to Complete the whole work as follows, the first airision to Big River by July 1" 1836 & the balance to Filot And by the 18 December 1836 the said Company further agree on completion of the work as aforesaid agreeably to specifications & to the satisfaction of the Engineer, to pay said Contractors five per cent (in addition to the five per cent above provided for) whom the Schedule prices Said additional five for Court to be paid in Stock of the Company at par It is further understood and agreed, that when a place for the superstructure of Bridges shall be fixed upon by the Engineers the said Contractors shall have the besilding thereof if they so elect at 10 par cout advance upon the lowest responsible bid which the Company may receive for said work, unless all bid received shall be deemed so exhorbitant That in the opinion of the Engineers the Bridges ought to be built by the Company as Company work This Contract is understood to embrace all the work specified on the entire line from the City of of Louis to the Filot Knob except the just, second, third & Sworth Sections already let to Holmes Shanahau & Green the fourthe Section (Maranece bridge) let to Bennett & Coman And is also to embrace those sections at the prices & on the Conditions herein provided, if the said Contractors (Natts 260) shall make such arrange ments as will enable thou to assume the Company's Contract with said Holmes Ho & said Couran Hoseinett & procure the company a release therefrom (which was done) Here a hote is inserted ennumerating all the erasures & interlineations in the printed

Specifications

In testimony who of The said Well Walls bet Wellelow Wellelow to buty in their own behalf had Luther it Frennett President, on bothalf of the St Louis & from Mountain Rail Road Compring have hereunte set their hounds of seals of the President aforesaid has caused the seal of the Company to be hereto affixed with the attestation of the Scenetary