

Thomas Osgood “Tuck” Taylor



'THE STRUGGLE'
1982

This book has been compiled for descendents of Jackson and Martha Nuttall Taylor; particularly those who attend the family reunion at Babcock State Park in West Virginia the week of August 30th, 1982.

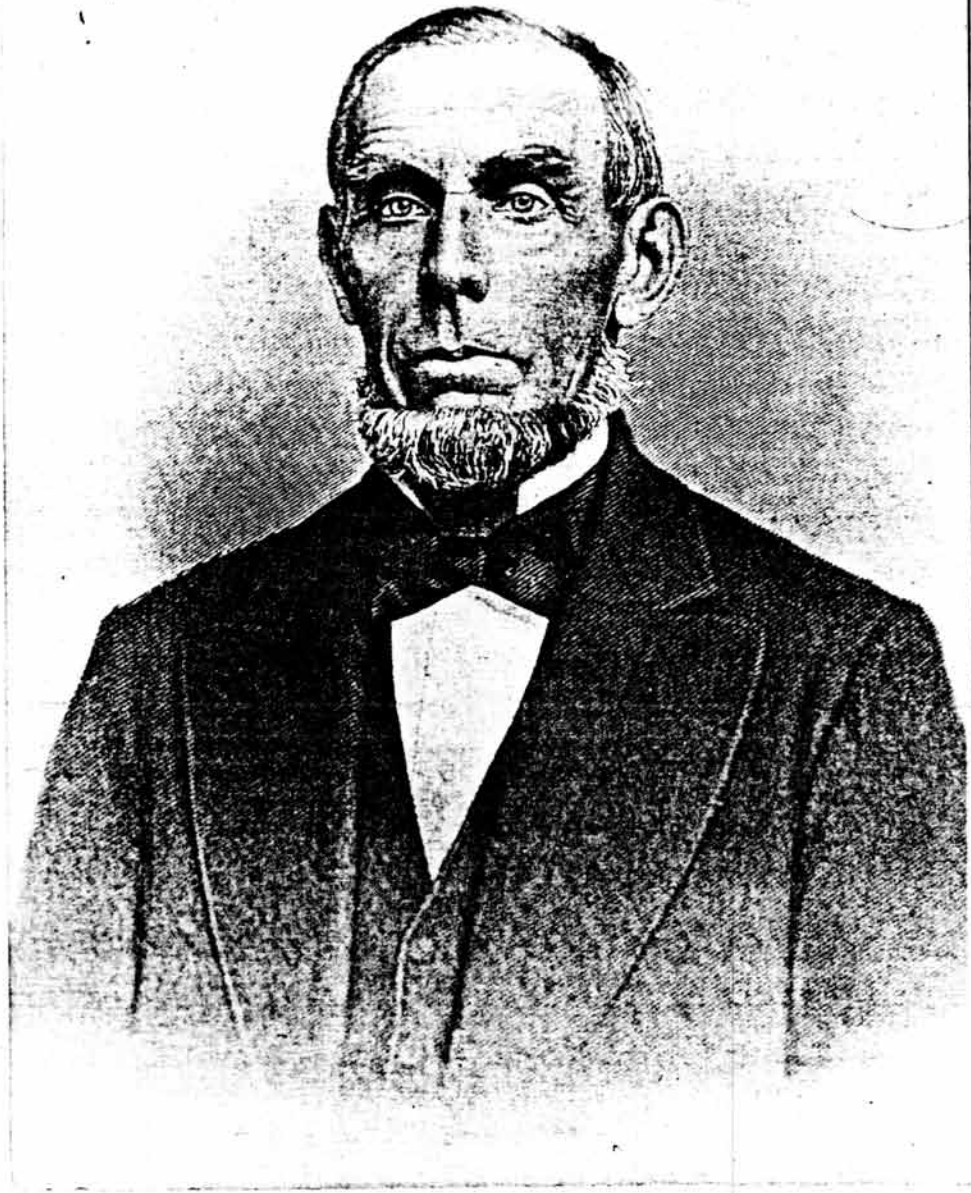
The name for the reunion comes from the name given to the annual Taylor trek in the 1890's from winter to summer quarters; from the main house at Nuttallburg in the canyon to 'Holmefield' the summer home in Edmond, West Virginia on top of the mountain.

Pictures reproduced in the book come principally from Fred Raven, an amateur photographer, who married Minnie Taylor. Most of his original glass negatives were rescued in the 1970's from Sea Cliff, New York. Other pictures were made by T.O. Taylor and Joyce Barlow (an English relative) living in Waterfoot, England who has helped with the English "Taylor Tree" as well as a number of publications.

Grace Taylor Himes geneology write-ups of 1952 are included as well as John Nuttall's history of his grandfather and Jackson Taylor's diary of his return to England in 1883. Other written contributions come from various "cousins".

Thanks are due to all the members of the family who helped in bringing the family tree up-to-date and in organizing "The Struggle".

Nuttall



JOHN NUTTALL

BORN 4/9/1817 AT CUPOLA CLOUGH
NEAR ACCRINGTON LANCASHIRE ENGLAND
DIED 9/17/1897 AT DUBREE, NUTTALL
MOUNTAIN, WEST VIRGINIA

BURIED IN THE OLD GRAVEYARD ON TOP
OF THE CLIFFS OF NUTTALL MOUNTAIN

JOHN NUTTALL

As Written by Grace Taylor Himes

There are not many of John Nuttall's descendants listed in these pages who remember him or even knew him. He is but a name to them - and the John Nuttall Estate something from which they get a little money every year. I knew him and lived in the same house with him for a few years. When I was 9 years old, he died at the age of 80. He seemed a very old man to me and yet during those years he was having the railroad built up Keeney's Creek mountain to open mines up in that mountain. This project was a very great one in his life involving much thought, planning and risking of money he had accumulated over his pathetically frugal, unselfish life - devoid I think of one real day of play.

He was born at Cupola Clough, a suburb of Accrington, Lancashire, England, of very poor parents. The whole vicinity was poor, as the people were either farmers, weavers or coal miners. This part of Lancashire was called "The Forest of Rossendale" and until the year 1500 had been kept expressly as a hunting preserve for the King's pleasure. It was about 30 square miles in area and prior to 1500 only 20 people lived in this forest. They were mainly officers of the King whose duties were to guard the deer and game in the forest. Henry VIII passed a decree allowing others to live there and in 50 years the population jumped to 1000. The Nuttall name is very ancient in the forest. It is said that they were Flemish or French - the name originally DeNoughto and that they came with William the Conqueror to England. 'Old Nuttall Hall was built in 1400. There is a reference to a Henry DeNouo (Noughto) in 1200 in my History of Rossendale Forest by Edward Newbegging. There are many Nuttalls in the list of the graves or greaves or reeves of the forest from 1559 on. The greave was appointed by the King to keep law and order in his forest. The name sheriff or shereef comes from this. He had baliffs and constables under him. A John Nuttall was a greave in 1566. John Nuttall has been a very common name in that vicinity for hundreds of years. For this reason, it has been hard to trace our ancestors through this maze of John Nuttalls. We don't even know who his grandfather was, but if I live long enough I shall find out.

Grandpa's father was Thomas Nuttall who was born in 1788 at Cupola Clough. He was a weaver and I suppose his father was a weaver before him. All we know of Thomas was that he married Alice Crabtree and they had six children - Lawrence, Dinah, Thomas, another girl who married a man named Hollin (their son John lived in Phillipsburg and died there). Our grandfather, John, was Thomas' 5th child and Alice the 6th. A year after the birth of Alice, Thomas died leaving his wife and six children with nothing. There were no benefits or unemployment insurance or relief checks in those days, so the children had to go to work to help out. John started to work at the age

of eight. He got a job as a tier boy in a calico print works where he worked three years. Then he went to work in a coal mine at Goodshaw Hill, a place near Cupola Clough, and worked there until he was seventeen. He returned to the print works for $3\frac{1}{2}$ years but, as he liked mining better, he went back to the mines and worked there for twelve years. He was married by that time to Elizabeth Pollard, the daughter of Henry Pollard and Elizabeth Holt. They had three children born in England - Alice, Elizabeth, Susanna, and Thomas. Elizabeth Pollard's father had died too when she was very young. John's mother never married again, but Elizabeth's mother, Elizabeth Holt Pollard, did marry again, a man named James Crabtree who had a large family. He was a cousin of John's mother, Alice Crabtree, and he had two sons who had come over to Staten Island and had started a silk mill there. The relationship between the Pcllards, Crabtrees, and Nuttalls is all very complicated as must have been the relationship of all those in Rossendale Forest, for they seemed to have intermarried many times through the centuries. I think we are descended from every one who lived there in early times.

John Nuttall decided to join his relatives and seek his fortune in America. He left his family in England and came over in May 1849. A year passed before he felt established enough to send for them to come. They arrived in Staten Island in 1850. On April 26, 1851, a fourth child was born who was Martha, my mother, and when she was two her mother, Elizabeth died of what they called the ague. Elizabeth's half sister, Martha Crabtree, who had married a Sutcliff, took care of the little family and John decided to leave that place of ill fortune and look for coal lands in a healthier place, for he had some money and he wanted some land and a business of his own.

He got a horse and taking some silk handkerchiefs made in the crabtree mill, he traveled slowly up into Center Co., Pa., selling his handkerchiefs on the way (I have one of these). He had heard that the coal was very good up there and he found that was true. It was good and he decided to buy. The Crabtree brothers put some money too in this first venture. Center Co. was almost a wilderness at that time. There was no railroad as yet and it was all pretty primitive. John built himself a log house in a clearing not far from his mine. The woods encircled it and there were bears, wild-cats, and wolves in these woods -- also many deer. John was so afraid that the children would wander out and be killed by these beasts that he had to lock them in the house during the day while he was opening his mine. He was getting it in shape to ship coal as soon as the railroad would come. My mother told me of hearing the wild-cats howling around the house, and of seeing fresh killed deer that they had slain.

He had to make trips to Philadelphia to buy supplies. He must have had someone stay with the children at these times, but he longed for companionship and a mother for his children. On one of these trips to Philadelphia, he met a Mrs. Anne Nuttall, the widow of

a Thomas Nuttall, whose husband and child had died on shipboard coming over. He saw her quite frequently and in 1856 they were married and she went to Osceola Mills or Nuttallville as John called his mine. A railroad came up there in a year or two and his business flourished.

However, John's second marriage was not a happy one. A son, Lawrence William, was born in 1857, but they separated and at the end of five years separation got a divorce. John gave her a cash settlement and kept his son and raised him. Alice, his oldest daughter, now kept house for him and the children. Then the railroad came, Alice and Susanna were getting older now and in 1864 Alice married George W. McGaffey one of his chief business associates -- and Susanna at the age of fifteen married his mine foreman, John Todd. John continued to live with Alice and her husband. He bought more coal land and began to make money.

Then a great sorrow came to him when his son, Thomas, aged nineteen or twenty, took a trip out West for the fun of it and also to report on mineral land out there. On the homeward trip he was bringing a pony with saddle and bridle for Martha, his little sister. While traveling on a boat, on the Ohio River, which had no rail around the deck, he was drowned. No one ever knew how it happened, but the supposition was that he went out at night to see about the pony and fell overboard. This was a sad time for them all.

Again John grew restless. He had heard of the good coal in West Virginia, so he went down there to look around. He found the coal very good indeed and began to buy. The railroad had not come into Fayette Co. yet, so he got his land cheap. His first mine he called Nuttallburg, and it was situated in a gorge called the New River Canyon about 60 miles east of Charleston. It was beautiful primitive country at that time and it still is, in the year 1955. He began getting his mines opened, his towns, stores, and post offices built, etc. In about two years, the railroad connected with his land and he started to ship coal.

For some time he went back and forth from Center Co., Pa. to Fayette Co., W. Va. Then my mother, his youngest daughter married my father, Jackson, Taylor, a young Englishman also from Rossendale Forest, who had come over to Staten Island to work for his oldest brother, James Taylor, who had a woolen mill there. This mill was later sold to Strook. Martha and Jackson Taylor met at New Brighton, when Martha was visiting her aunt, Martha Crabtree Sutcliff, who lived there. They fell in love and were married in April 1872. Grandpa asked them to come to W. Va. and make a home for him there, so they went.

They lived in a small house for a few years, then the children began to come very regularly -- a boy and then a girl two years apart, so Grandpa built a twenty room house sprawling over the rocks at Nuttallburg. Great boulders hung perilously up the mountain

above it. The railroad and the wild and muddy New River ran along at the foot of the gorge just below the house. The mountains were beautiful and the home happy, but the air was full of coal dust and coke oven smoke.

Uncle Will Nuttall had married Katharine Dubree, a girl from Phillipsburg and they lived up the mountain above us. Uncle Will was an indefatigable Botanist, and a very fine one in fact, and has had plants named for him. Their home was full of books, music, Rodgers' groups, botany specimens and other things fascinating and cultural. Our home was full of children, English help and much company coming and going.

Nuttallburg had many negro miners. There were only 4 or 5 white families on the place, but we had a good time among ourselves.

Grandpa married again, Martha Blume, a woman of suitable age and temperment, the daughter of J. L. Blume of W. Va., with whom Grandpa had many business dealings in buying his land. They lived in a wing of his big house. I remember well going to see them. They would be sitting by their glowing coal fire, their hands folded, rocking and chatting. He was a gentle, kind old man - much interested in his business and his children. He had gotten a good many Englishmen to come over and help him, so he had companionship and comforts. I never remember seeing him play a game, though - not even checkers or chess. His life had always been too full of work for games.

Later he built a church at Nuttallburg, on the mountain where all denominations had services. He was a religious man. I thought he and his people had always been Baptists, but there is a difference of opinion. Some say he was a Methodist; others say he was an Episcopalian. He was good and that is what matters.

This Era of Peace was shattered by his decision to build a railroad up Keencys Mountain - a tremendous engineering feat. But he was determined to get the coal out that was on top. Grandpa paid the whole cost of this railroad, which was \$290,000. It took all his savings and was a big gamble for him. The C and O R.R. agreed to maintain the road and charge all the lessees so much for hauling their coal, which Grandpa would get. Grandpa's railroad was begun in 1892 and finished in 1894. A Virginia man named Langhorne was the engineer of this road. He was the father of Lady Astor and Charles Dana Gibson's wife - the famous Langhorne sisters.

There was a lot of terrible blasting and rocks tumbling down the mountain some of which hit our house and made great holes in it. But by that time we had a summer farm "Holmfield" on top of Nuttallburg Mountain and we were out of the danger. How much we enjoyed that home on the mountain, so bright and clean and fresh after the smoke of the canyon! Our cousins from Philipsburg would come -- Caroline McGuffey, May Todd and the Taylor cousins from Newburg, N.Y. We rode horses, had picnics, parties, explored the forests, watched

the sunsets - simple pleasures, but they were great pleasures which I will never forget.

Grandpa then built himself a house at Dubree. The first mine opened which had been taken over by Fred and Herbert Rothwell ~~Taylor~~, relatives from England who had come over to help Grandpa at Nuttallburg. Grandpa was happy there and he rested from his labors. He was now 80 years old and he had been working and planning for 72 years. He now had 28,000 acres of land, 7 or 8 coal mines and was considered a millionaire. His work was over and he began to fail.

Fred Rothwell, who was a great sportsman, died in the summer of 1897 as the result of falling on the pommel of his saddle in jumping. Then Grandpa died about a month later.

I remember following the wagon carrying Grandpa's coffin over the rocky road to the grave yard in the woods on top of Nuttall mountain, where he was buried -- a fitting resting place, unadorned, high and serene, where there was strength, vision and solitude -- all symbols of his long life.

THE LIFE OF JOHN NUTTALL

Written by his Grandson, John Nuttall.

The city of Accrington, in Lancashire County, England, was divided into districts or surrounded by many suburbs, each with its own name. Thomas Nuttall was born in 1788, in one of these suburbs named Cupola Clough; he became a weaver and married Alice Crabtree; they had six children, the fifth child was named John, and the sixth child was named Alice. A year after the birth of Alice, Thomas, the father, died, January 3, 1820, and the widow had a hard time feeding her family and the children had to go to work just as soon as they could. In that era, the age of eight was considered old enough for a child to begin work and, at that tender age, John had to start working. He got a job as a tierboy in a calico printworks, in a suburb named Love Clough and stayed at that three years, until he was eleven; he then went to work in a coal mine in another suburb, Goodshaw Hill, and was there six years, until he was 17. He, next, went back to the printworks as an apprentice and remained there three and one-half years, but he preferred coal mining and went back to that and continued working in the mine for the next 12 years. John was born April 9, 1817, and in April, 1849, he was 32 years old and knew all about coal mining and had saved enough to emigrate to America. He had married Elizabeth Pollard and they had three children, Alice Elizabeth, Suzanna and Thomas.

Elizabeth Pollard had had the same misfortune as John had, in losing her father when she was a small child; John's mother never married again, but his wife's mother did remarry with a man named Crabtree.

After Mrs. Pollard married Mr. Crabtree, they had three children, William and Jonathan and Martha, and Martha married a Mr. Sutcliff. These three children had emigrated to America and had established a silk mill on Staten Island, under the firm name of Crabtree & Wilkinson, and specializing in silk handkerchiefs.

Since I shall have to write my grandfather's name a hundred times, it will save work and space if I refer to him hereafter, by using only his initials.

J. N. was cautious with his money and he did not want to risk burning bridges behind him, so he decided to go to America alone and make sure of a job before taking his family over.

He wrote to the Crabtrees and they replied that they could give him a job in their silk mill since he knew cloth printing; so he went and landed in New York in May, 1849, then sent for his family the next year, after becoming fully satisfied about his job.

April 26, 1851, a fourth child, Martha, was born, and two years later, the mother died and Mrs. Sutcliff took charge of the baby, Martha. Both J. N. and his wife caught some disease which the doctors of that day could not diagnose and they gave it that catchall vague diagnosis of the ague; J. N. slowly recovered, but his wife did not.

At the silk mill, he was able to save a lot more money each year than he had been able to save in England, and he did not spend his entire savings in the emigration; so as, he liked mining better than cloth printing and he knew he could do better at that than in the silk mill, he read the papers and made enquiries, watching for an opportunity to join somebody in opening a mine. Finally in 1856, seven years after his arrival in this country, he heard of a possible opportunity to get into coal mining. He heard, or read, that The Pennsylvania Railroad was building a branch line from Tyrone, near Altoona, Pennsylvania, to climb the mountain and go on to Philipsburg and Clearfield, and that this line would tap large amounts of coal and timber there.

He went up to Philipsburg by stagecoach and hired a horse and rode along the surveyed right-of-way, making enquiries about coal seams and prices.

He rode down to Osceola Mills, about eight miles below Philipsburg, and there he heard of a Mr. Colburn who had a good coal seam on his farm about five miles further on towards Tyrone, and he went on over there.

Mr. Colburn was digging some of this coal for himself and neighbors; he had 200 acres and it lay properly alongside the right-of-way and Mr. Colburn did not put a high price on his place, it being so isolated. The coal was of reasonably good quality and J. N. decided that this would be his place and he went back to Staten Island; what he then agreed to with Mr. Colburn is not known; maybe some verbal agreement or option or down payment. When he told the two Crabtree brothers about the huge profits in coal, they readily agreed to join with him; the demand for coal far exceeded the small amount of coal being produced and prices were consequently high. William Crabtree agreed to buy the land and Jonathan agreed to put up as much cash as J. N. lacked for opening the mine and building a village, and a store and buying mine cars, rails and mules, and J. N. went right to work on his new mine, even though the branch was only started out of Tyrone.

He first went to Philadelphia to see about buying some supplies and equipment and at his boarding house he met a Mrs. Ann Nuttall. She had emigrated from England recently and her husband and two children had died and left her stranded. Her husband was said to have been a distant cousin of John's. J. N. liked Ann and was sorry for her and he saw her again on each of the several trips he had to make to Philadelphia. They each needed the other right badly and they got married in November 1856. J. N. had by then constructed a few houses and had a bit of a commissary and had named his growing village, Nuttallville; he and Ann went to Staten Island and got the children and went up to Nuttallville.

To be more technically correct about the branch, Morgan Hale & Company bought 38,000 acres of coal and timber lands on top of the mountain above and back of Tyrone, and they started the branch to develop their property and the P.R.R. took it over when it was well along.

Nuttallville was the first place that this branch reached and when it got there in 1881, J. N. had his mine well developed and was ready to ship coal and his profits were considerable.

A Mr. Robert Powell of Philadelphia heard of the big profits and he went up to Nuttallville to see if he could get in on this bonanza in some way and the result of that visit was that Mr. Powell bought out the two Crabtrees and bought another 650 acres and put up still more cash for more houses and more equipment. Mr. Powell knew nothing about mining and would take no part in it but to put up the needed money, and he would continue to live in Philadelphia. Whether J. N. retained a full half interest is not clear, but apparently he did. In view of the fact that J. N. would furnish all the knowledge and experience and do all the work and assume all the worries and privation of life in the woods, Mr. Powell generously agreed to pay him a \$.05 a ton royalty for producing the coal. They were both quite pleased with the arrangement and both made good profits and J. N. was so pleased about it that he renamed his town and called it Powelton. This contract was executed in 1862.

With plenty of cash for development, J. N. quickly brought the production up to 4000 tons a month and at \$.05 a ton royalty, that meant \$200 a month, which was a huge salary in that day; and he also got his partnership share of the overall profits. Dayhands at his mine got only \$12 a month, but living costs were in keeping with these wages and a man could raise his family on that \$12 a month in the 1860's.

J. N. used some of his profits to open another mine of his own on Coal Run back of Osceola Mills, about 5 miles west of Powelton, and he named it Decatur, as it was in Decatur township, of Clearfield County. The 12 mile round trip on horseback consumed too much time, and Mr. Powell agreed to buy out J. N.'s interest in Powelton in 1866 and then J. N. moved to Osceola Mills.

The second marriage of J. N. did not turn out happily; they had married without knowing each other scarcely at all and in a few years they discovered that their natures and personalities and beliefs clashed and they could not get along harmoniously, nor happily. In 1861, they agreed, by mutual consent, to separate for five years and signed a paper to that effect; he agreed to pay her \$2.50 a week, which seems a pitiful sum today, but at that time that was all a wage earner got for raising his family. He had invested in a house in Philadelphia and he gave that to her also, and he allowed her to have temporary custody of my father; Lawrence William, who was born to them at Powelton, September 17, 1857. At the end of the five years, J. N. was still sure that he could not be happy with Ann and they got a divorce and he gave her a good cash settlement and she went to England to visit relatives. Upon her return, she bought a home in Philipsburg and lived there until 1900. J. N. had taken custody of my father before the divorce.

Goerge W. McGaffey, a young carpenter from Vermont, had drifted in to Powelton and helped J. N. build his village and he married

the eldest daughter, Alice, in 1864. J. N. had a mine foreman named John Todd at Powelton and he married the next daughter, Suzanna, about a year before Alice got married.

When J. N. moved to Osceola in 1866, to give his whole time to his new mine Decatur, he had my father, Lawrence William, back with him and apparently the McGaffneys kept house for them all.

The new mine proved a total failure; the coal seam would disappear and they had the expense of driving entries to find it again, then lose it and, after two years of this, J. N. had to abandon it entirely. But he still had plenty of money left over from his Powelton mine and he bought 1200 acres on the edge of Philipsburg, Pennsylvania. Philipsburg is in Center County, but this 1200 acres was on the other side of the Moshannon creek, in Clearfield County, the location being a suburb known as Pt. Lookout. He named his new mine Decatur #1 and spoke of the failure as Old Decatur; he built a village and a school and a store and was able to salvage some equipment by hauling it or shipping it from Old Decatur. For some unexplained reason, his new town was locally referred to as The Nuttall Blocks, but officially it was Decatur.

John Todd was mine foreman of this new mine and had by now learned everything about mining coal the way J. N. wanted it done and J. N. had no worry about the production of the coal. George McGaffey had proved to be a young man of sterling qualities and with a level head and J. N. had taken him into the office and he was rapidly learning all details of the outside manager which meant keeping the books, selling the coal, making up the payrolls, attending to the rentals and repairs of the houses, managing the store and handling the finances and also purchasing agent for the mine. This new seam of coal proved a good one and J. N. opened a second mine and called it Decatur #2, and as soon as money began coming in from this place, he opened another mine, named Laurel Run #1, and then he opened Laurel Run #2, and it would seem that these two mines were on land leased from the owners, #1 leased from Richard Hughes and #2 leased from John Shaw.

In 1868, his son, Thomas, finished his schooling. He had a longing to take a trip out west and see Indians and buffaloes before he settled down to coal mining, and J. N. agreed to the trip and helped him get a freelance agency to sell Fairbanks scales wherever there was no present agency west of the Ohio. Thomas must have sold a good many scales, inasmuch as he took quite an extensive journey far out west, and on his return he bought an Indian pony, saddle and bridle for his sister, Martha. When he reached the Ohio he saw a paddlewheel ready to continue its journey upriver to Pittsburgh and he took passage on it, for a rest and to speed his return home. At bedtime he remarked that he was going down to the lower deck to see if his pony was alright and that was the last seen of him; this was 1868, about August.

In the early spring of 1870, J. N. read in his paper about the construction of the C & O Railroad in West Virginia; it had started at Old Pt Comfort at the mouth of the James river and followed the

river to its source and was now over the crest of the Allegheny; it would go down through the New River gorge and down the Kanawha river and end at Portsmouth on the Ohio, and construction was being started from Portsmouth to work back east and meet the other crew.

The article stated that there were many seams of coal on the Kanawha and a couple in the New River gorge. J. N. had profited well by coming to Powelton and buying land before the railroad got there and he thought it might pay him to go down and make enquiries in West Virginia on the Kanawha. He was 53 years old and had worked hard for 45 years and now had a very nice income and he was entitled to ease off and undertake no more privations. Hard work seldom hurts anybody if they live right and J. N. was always most abstemious and moderate in everything and used no tobacco and no alcohol, and at 53 he was just in his prime. He was about to embark upon a second life of 27 more years of considerable accomplishments.

The McGaffneys had no children and they were giving J. N. and my father a good home; they also had a home for Martha, but she was going away to school nine months and in summer visited many weeks at Staten Island and was at Decatur very little at this period. The two sons-in-law were competent, able and willing to look after the Pennsylvania mines and J. N. was footloose. He went down into Virginia by train and there boarded a stagecoach of the James River and Kanawha Turnpike and in two days arrived at the tavern of Dr. Cooper at Locust Lane in Fayette County, West Virginia, on the headwaters of Keeneys Creek. He was surprised to see them burning coal and it looked like a fine grade of coal and he made enquiry about it, and was told that it was mined from a seam on the bank of Keeneys Creek nearby. A local surveyor, J. L. Blume, was at the tavern, probably to get his mail, and J. N. got into conversation with him and could have found no better informed man to talk with, as Mr. Blume knew the corners and owners and prices of all the lands around there. Mr. Blume stated that this coal seam on the bank of Keeneys creek was $3\frac{1}{2}$ feet thick clean coal; that it was 5 miles down the creek to the top of the New River gorge and the C & O was to come on this north side of the river; that two years ago when climbing down to New River he had seen a fine four foot seam of coal exposed by a slide on the side of the gorge and land was \$1.00 an acre. J. N. decided to lay over here a few days and investigate.

In an effort to keep this account as brief as possible, I am omitting a great many details and side issues, especially from here on.

They found the second seam of coal about 200 feet below the cliffs that rimmed the gorge and J. N. decided to open a mine here on Short Creek, which was one mile west downriver from Keeneys creek. He pointed out to Mr. Blume what he wanted and Mr. Blume took him to see the owners of those tracts; the price had heretofore been \$1.00 an acre, but the owners naturally, and not unwisely, asked more when they saw that J. N. had decided to locate here. The first owner asked \$4.00 an acre and got it without dispute and the next man hearing of that, asked \$6.00 and still no argument and so the next owner asked \$8.00 and got it, and J. N. signed up for 657 acres. He took a lump

of his new coal back to Philadelphia with him and had it analyzed and found it a better coal than his Pennsylvania seams, so he raised as much cash as he could and arranged for his two sons-in-law to manage his Pennsylvania mines and he went back to Locust Lane in the fall. He bought another 1500 acres, and the prices varied according to how close they were to his mine and how badly he needed that tract; you could perhaps say that in general they were \$8.00, if anywhere within reach of a mine on the side of the gorge above the Railroad. George Alderson had a tavern on the turnpike, four miles west of Locust Lane, and he owned 547 acres of wild land west of his farm; it was far back from the gorge and J. N. had no need for it, but Mr. Alderson wanted to sell it at \$1.00 an acre and J. N. bought it. This was the only \$1.00 land that J. N. got. A poorly informed school teacher who lost his job undertook the writing of what he claimed was a history of Fayette County; he stated that J. N. got his lands at \$.50 an acre and this was definitely untrue.

When J. N. came back to Fayette County, in the fall of 1870, he brought along Mr. W. H. Holland to be his mine boss and to help with the many jobs that had to be done. They worked 18 months getting everything done that they could do until the railroad should arrive and bring them their heavy goods and rails, and the railroad not yet in sight, J. N. took his crews a mile upriver and opened a second mine on Keeneys creek.

His first mine was planned to have a maximum production of 500 tons a day and it was named Nuttallburg and postoffice granted under that name. The C & C had listed the place as Nuttall on their tariffs and could not change them and the place became known as Nuttall and the Burg was used only when addressing a letter. The second mine was on half the scale of Nuttall and to produce a maximum of 250 tons a day, and was named Keeneys Creek. The railroad was built from both ends and two crews met at the bridge over New River, 7 miles below Short creek, and the road completed February 1873, two years and a couple of months after J. N. started to work on his mine. Coal prices were still high and as soon as J. N. got all his houses built and his store stocked and had paid for all his equipment, he built coke ovens. When all was done, he had 17 double two-family houses, 80 one family houses, 220 bankcars, 30 bank mules and 80 coke ovens at the two mines. The word mine was used only collectively in those days and each mine was called a bank; the men put on their bank clothes and bankcap and banklamp and worked in the bank and had a bankboss.

Almost all the settlers living on top of the gorge worked in the mines and other settlers bought a few acres and built homes, so that half the men lived in their own homes on top, and this settlement was called Nuttall Mountain, until they finally got their own postoffice and named it Edmund, named for Eddie, the son of John Ryan, who applied for and got the first postoffice. Short creek is one mile downriver from Keeneys creek and two miles further on downriver is Fern Creek; when J. N. got his mines going he began buying more lands and he bought everything along New River from Fern Creek up to

a half mile above Keeneys Creek for a river frontage of $3\frac{1}{2}$ miles. He bought everything on back to the turnpike, fanning out a bit as he went back and the turnpike ran from four to five miles parallel to and back from the gorge. He had in this boundary about 12,000 acres and was satisfied with this, but men were continually coming to see him, wanting him to buy their land. Some man would die and an administrator appointed to sell the place and nobody wanted it and the administrator would appeal to J. N. to please buy it so they could get the estate settled.

J. N. bought many of these offerings, partly as a favor and partly because he believed all land would increase in value and he couldn't lose by buying it. In this manner he bought another 12,000 acres without plan and it was badly scattered and jagged and poorly connected, often isolated. In almost all of his purchases, the seller reserved the surface whereon was his home and cleared fields, but J. N. got all the mineral solidly.

Martha, the fourth child of J. N., married Jackson Taylor, a Bookkeeper, and they came to Nuttall as soon as it got going and he kept the books the whole way through. His good friend, Fred Rothwell, a relative of the Taylors who had come from England with his brother, Herbert, to help, was given the job of store manager, and Dr. L. B. Rupert was appointed physician. In 1878, my father was 21 and finished his schooling and he came down and was put at various jobs, then was taken into the office and handled the finances, kept some of the books, attended business meetings for J. N., sold the coal and handled much of the correspondence. J. N. had had to go to work when he was 8 years old, but his mother had taught him his three R's and he could write a very creditable letter; his only weakness was in having to dodge around using such words as possession.

In 1882, J. N. decided to divide up a little with his children; he designated certain tracts as being in a leasehold, to be known as the Nuttallburg Coal & Coke Company, and he gave Jackson Taylor, my father and Mr. Holland equal partnership in this leasehold with himself as the fourth. The lessees had to pay J. N. individually, \$.10 a ton royalty on all coal mined and an additional \$.02 a ton for twenty years, to repay him for the houses and equipment. They shipped so much coal that in 12 years J. N. figured he had received enough return from the extra \$.02 royalty to have repaid him and he canceled it out in 1894. J. N. also divided up with his two sons-in-law in Pennsylvania, but I do not know the details; my father said they each got \$50,000.00, but I do not know if it were cash or if they got partnership in the Pennsylvania mines and realized the \$50,000.00 apiece when the mines were sold upon the death of J. N. The new leasehold included both of the New River mines and the partners apparently made good profits in spite of the \$.12 a ton royalty payments.

Money was piling up from the two New River mines and the four Pennsylvania mines and by 1887, J. N. felt he must do something about investing it. He owned practically everything within a mile of

either side of Keeneys Creek back to the turnpike and well beyond it. What they had thought was two seams of coal turned out to be one and the same seam; the upthrust of the strata was deceptive and they later found that this one seam, the Sewell seam, cropped on both sides of the Keeneys Creek hollow all along it. There was room up that hollow back from the gorge for seven good mines, if only there were some way to get it down to the C & O. J. N. climbed up and down the length of Keeneys creek and along the side of the gorge, figuring on it and finally decided that a branch railroad could be blasted out of the hillside. It would start at the mouth of Keeneys creek and climb up to run above the village of Nuttall and go a half mile beyond, then switch back and climb on up and enter the Keeneys Creek hollow, high enough for an engine to be able to chug on up the hollow to the turnpike. He told the C & O that they could get the revenue from seven new mines if they would build this branch; since they got \$8,000.00 freight revenue for hauling one acre of coal to the nearest market, they wanted the new mines, but they said it would be impossible to build any railroad up that steep mountainside. J. N. employed their own engineers to make a survey and they reported it could be done, but that it would cost a third more than normal for such a road and more than the output up there would warrant. J. N. countered by offering to contribute \$100,000.00 and thereby dispose of the adverse argument. The C & O thought that fair enough and it was almost agreed upon, but not definitely so. Mr. Low, of the Lowmoor Iron Company in Virginia, had bought land on the southside of New River, opposite the mouth of Fern creek, and he was very anxious to mine his coal over there. When he heard of the negotiations of J. N., he talked to other landholders over there on the southside and they agreed to put up the cost of a bridge across New River at Fern creek, if the C & O would build some trackage on the southside for them to mine their coal over there. This focused the attention of the C & O upon the fact that they needed a second track through this worst part of the gorge.

The C & O did not have enough expansion money to do both things, and they accepted the offer of Mr. Low which, of course, was their wisest choice. They agreed to build the bridge five miles up-river near Sewell and build their second track all the way down the south side to the Hawksnest bridge; this steepest portion of the gorge so often had slides that blocked the whole line for many hours or all day, and the second track would be very valuable. It was a bitter disappointment to J. N., when the C & O told him with regret that they could not build his branch; he kept on talking to them and they listened to him because they wanted the revenue of any new mines they could get. Finally, it was agreed that J. N. would pay the whole cost if the C & O would build it for him, or cooperate with him to every extent possible in getting it built. And the C & O agreed that they would take it over and keep it in good condition and operate it forever after with no further cost to him and bring all products of his lands down to the mainline with no cost to J. N. As an inducement to get him to build the branch, the C & O said they would charge all lessees a toll for bringing their coal down to the mainline and refund all these tolls to J. N. and he could thereby get his money back, and a toll of \$.05 a ton was verbally agreed upon, to be later raised or lowered according to prices and conditions.

It would take all of the savings of J. N. to build this branch and he could open none of the mines himself and would have to lease them; both J. N. and my father prided themselves upon having never borrowed a dollar. The branch cost \$290,000.00 including the preliminary and grade surveys.

Mr. Holland got first choice of a lease and Fred Rothwell second choice and there being no other associates wanting a lease, the others were given to friends who did not have quite enough funds to fully develop their leases. The branch was started in 1892 and completed in January 1896, seven miles long; it reached the first lease, taken out by the Boone brothers, in 1894. J. N. had many noble and fine qualities, but every man has some weak spots and the weakness of J. N. was in not looking after details and the smaller things and he had very few dealings with surveyors or lawyers.

In describing the Nuttallburg lease, he merely named some tracts and a creek and nobody knew the acreage nor the boundary lines; and in specifying the Boone lease, he used only creeks and the county road and its acreage was unknown and it included a portion of what had been assigned to the Nuttallburg lease. He thought he owned everything up the Keeneys creek hollow and then discovered that he didn't; he had no map of his property and had seldom gone to look at any tract he had bought after the first five or six thousand acres that he needed for his two mines. He was a great and good man and, if he became careless during the latter part of his second life's work, he must be readily and understandingly forgiven for any small errors or the lack of the energy to attend to all details.

In giving the leases to his friends, he told them that the royalty would be \$.10 a ton and that the C & O would charge them \$.05 a ton for hauling their coal down to the mainline. They accepted this, but asked for a guarantee that he would never levy any toll of his own for use of his branch and he readily agreed to put such a guarantee in the leases. When the leases were drawn up, something went wrong and it is difficult today to understand why nobody saw the error; there is every indication that nobody at all ever read a lease after it was written.

The Boones were able to start shipping coal in 1894 and the Hollands early in 1895; the C & O charged them the \$.05 a ton toll and nobody thought anything about it because that was according to the agreements. In April 1895, the Boones finally took a look at their lease and discovered that in the lease J. N. guaranteed them free delivery of all of their coal to the main line and said not a word about any toll. They went to see their lawyer and he said there was no question about it at all; so the Boones notified J. N. of the wording of the lease and J. N. saw that it guaranteed free delivery and he could do nothing but tell the C & O to levy no more tolls, quite a loss. Many things went wrong up the hollow, but nevertheless the building of the branch and the opening of the seven mines was the crowning achievement of J. N. and he revelled in all of the bustling and hammering and sawing and he built a house at the Rothwell lease

and moved up there to be in the midst of it.

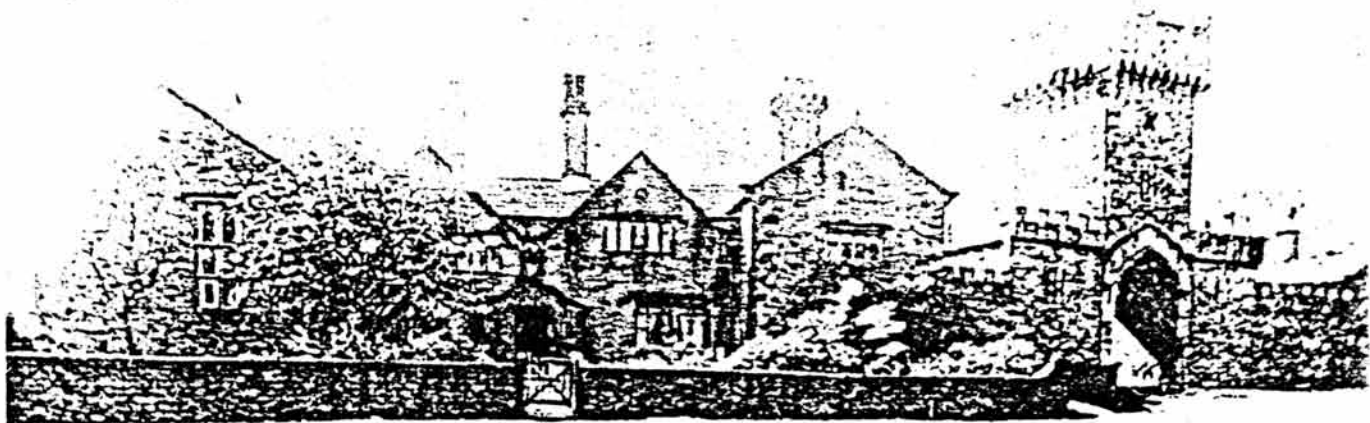
Fayette County had been divided into six magisterial districts and when the branch was completed, the County Court carved out a new seventh district to include most of the holdings of J. N. and named it Nuttall district.

I failed to mention at the proper place, that Mr. Blume had a spinster daughter named Martha who was maybe 12 years younger than J. N.; J. N. had endless dealings with Mr. Blume and saw much of Martha and they liked each other and about seven years after they had met they got married, and it was a congenial and happy companionship and she, of course, was with him in his new home at Rothwell.

When J. N. finally sat down at Rothwell with no more planning, he began to slowly slip and by August of 1897 he was bedfast. Fred Rothwell had jumped his horse over a fence and the horse caught his foot and fell on him and he was badly injured. Fred died September 13, 1897 and this hurt J. N., because the two of them had been such warm and close friends for so long, and J. N. died four days later.

They were each buried on the cliffs above the old Nuttall mine.

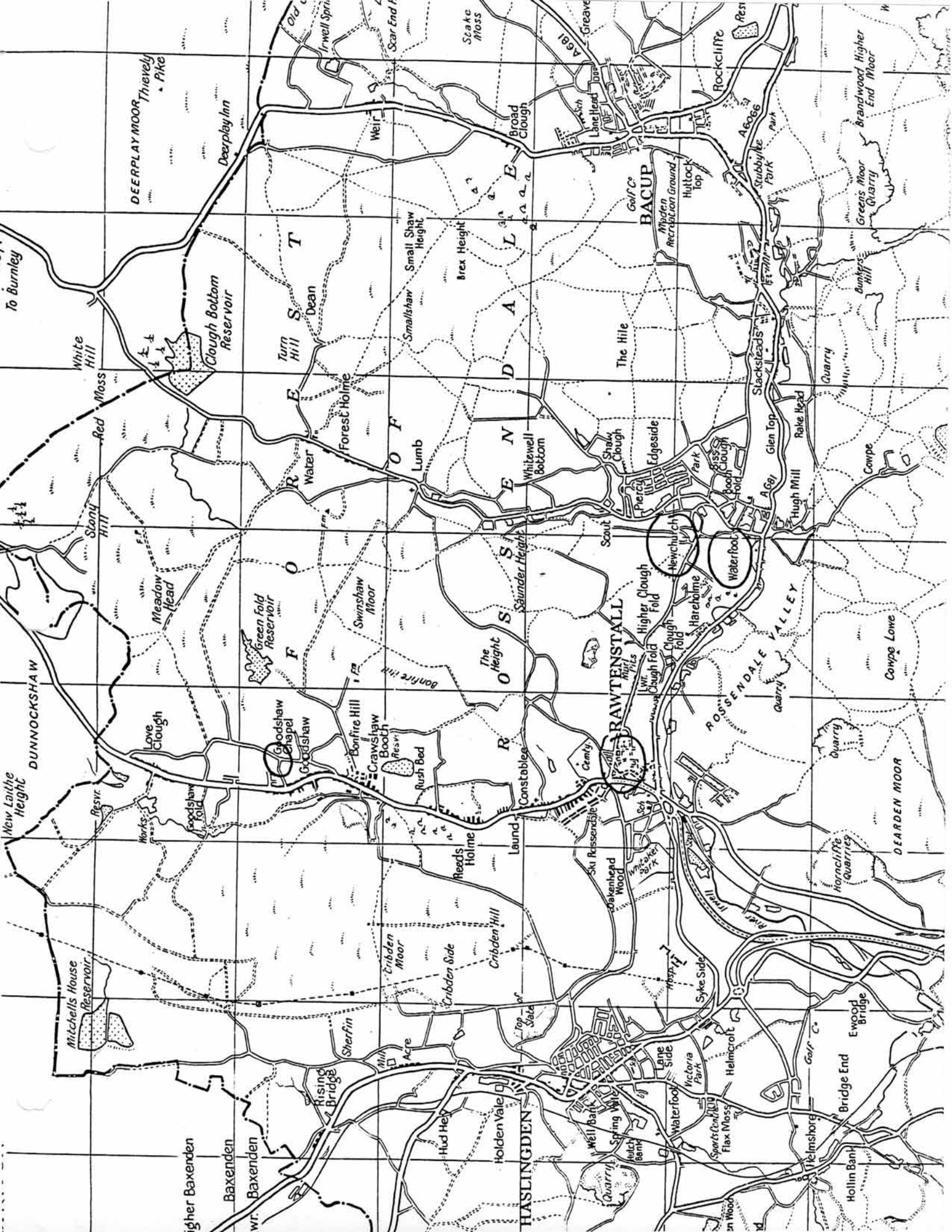
J. N. left everything, share and share alike, to his four children and gave his widow, Martha, use of the home for her life and an annual allowance of \$5,000.00 a year.



OLD NUTTALL HALL FARM

From "Rambles 'around Rossendale"

Coming down from the Hoof and crossing the Manchester Road the rambler still plods his way amid the woodlands of Higher Gollingwood, across the fields to the river banks, abutting on the old village of Nuttall. Here we will stay our steps for a while, for we are amid the ruins of a rich past. The hamlet appears to have sprung up around the old home of the De Notoqhs, on the site of which stands what is commonly known as Nuttall Old Hall. The date of their settlement is not known. It is said, however, they were dwellers in this district between 1377-1399; and the estates remained in their hands until 1698, passing then by marriage to the Lonsdales of Fieldhouse and the Formsbys of Formby; and then by purchase to the Grants. The present building, a view of which is annexed, is a quaint gabled structure heavy with mullioned windows and drip stones, the baronial tower over the gateway being a restoration of part of the original building. Within are portions of the old oak panelling of the former house, the date of its erection being transferred to a stone in the present structure, MCCCCXXIX.* Nuttall is near Rautinstall.



During times of alteration or rebuilding, the congregation at Cloughfold has on more than one occasion assembled for divine service in the unfinished erection, in order to secure the bequest, and fulfil the provision of the will, that they should never be at one time, six weeks without preaching at the said chapel.

The two endowments referred to above, have accumulated, the £40 to £55, and the £150 to £205, being £260 in the whole; a very small augmentation, when the length of time, and the increase of the value of property in the district, are taken into account. A great want of foresight on the part of the earlier Trustees was displayed in the disposition of the two bequests. Had the original sum, instead of being put out at simple interest, been invested in the purchase of land, the increase in the realisable capital would probably now have been tenfold. But even this small accumulation is accidental, and is to be accounted for in this way, that during a certain number of years in the course of its existence, the church was without a minister, and consequently, the interest instead of being paid away was added to the capital.

About the year 1750, a small chapel was built at Lumb for the use of the Baptists residing in that neighbourhood. The circumstances which led to its erection are worth recalling. The inhabitants of the Lumb and Dean valleys have long been favourably known for their musical skill; and to cultivate their love of the art, it has been their custom for generations to hold meetings for practice in each others' houses. Sacred music was their *forte*, as it continues to be to this day, and it would seem to have exercised a hallowing influence upon their minds. Of these singers, John Nuttall and several others became members of the Baptist church at Bacup, then under the ministry of Joseph Piccop, and by their example and exhortations, and the reading aloud of religious authors at the musical gatherings, many were led to follow in their footsteps. Though the meeting-house at Lumb was built in 1750, three years elapsed before a church was formed. In May 1753, the Sacrament of the Lord's Supper was first administered to the

assembled members, John Nuttall having been chosen as their minister. After having been in existence at Lumb for some time, the congregation, for reasons not explicitly known, but probably to extend their influence and usefulness, moved in the year 1760 to the more populous neighbourhood of Goodshaw, where they had prepared a chapel. The meeting-house at Lumb was denuded of its furniture, and the pulpit and seats were carried on the backs of the congregation over the intervening hills to the newly erected domicile. Here Mr. Nuttall settled and continued to minister until his death on March 30th, 1792, aged 76, having successfully laboured among the people for the space of forty-five years.

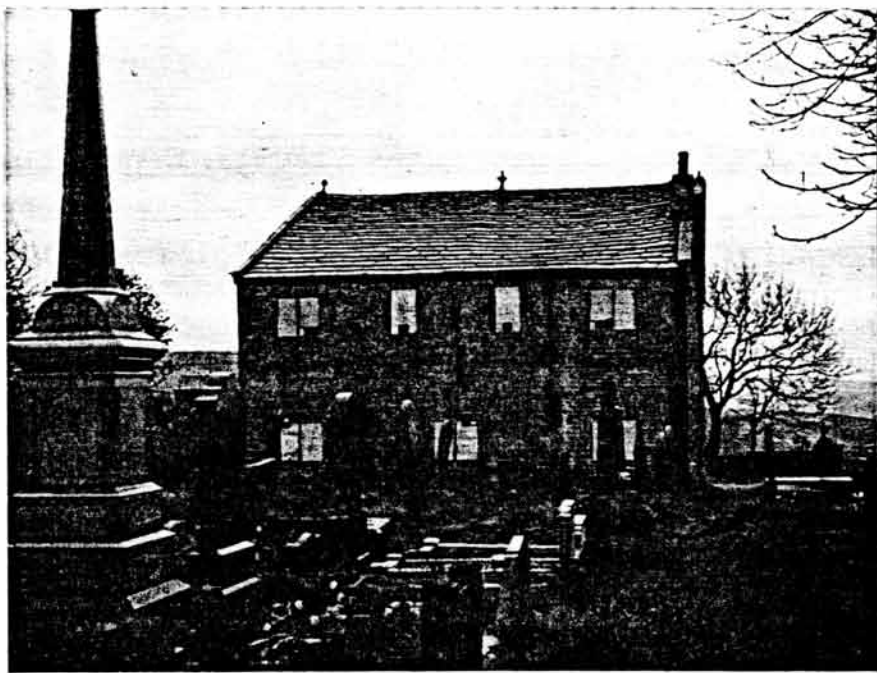
The other Baptist Chapels in the district are of much more recent origin than those of Bacup, Cloughfold, and Goodshaw, and in the table given below the respective dates of their foundation are stated. From the early Baptist Churches in Rossendale have sprung a numerous progeny of kindred societies. The Baptist Churches at Rawden, near Leeds; Heatton, near Bradford; Gildersome and Hartwith, in Nidderdale; Rodhillend, near Todmorden; Stoneslack, near Heptonstall; Salendine Nook, and Cowling Hill, all confess their Rossendale parentage.

The following Table (*f*) gives some particulars of the present position of this denomination in Rossendale. The names of the Churches are placed in the order of the date of their foundation.

(*f*) Compiled chiefly from returns given in the Baptist Hand Book for 1893.



Love
Clough,
Lanc.
May 12



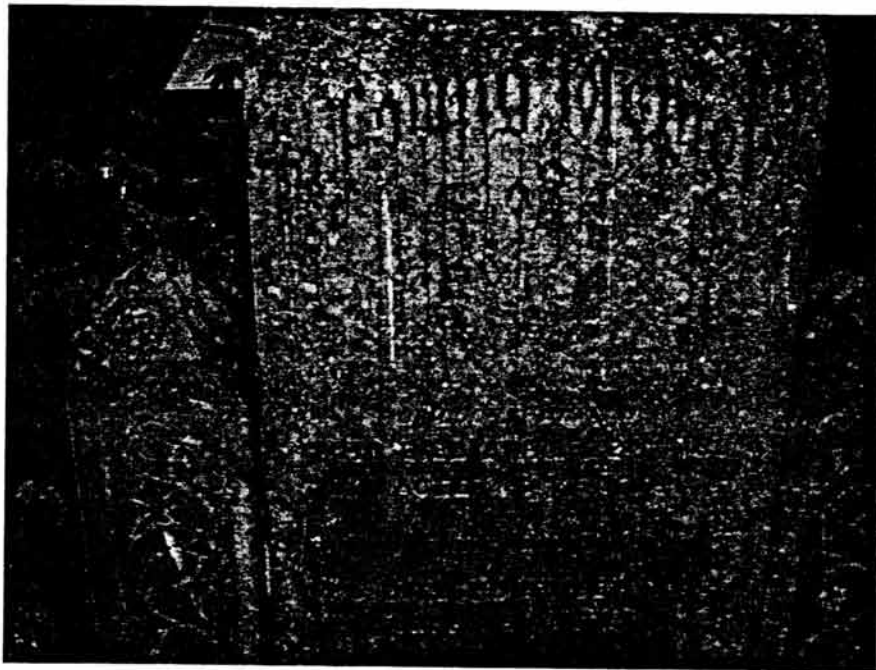
Goodshaw
Chapel,
Love
Clough

John
Nuttall
was
first
pastor

Rear
of
Goodshaw
Chapel



Gravestone,
Goodshaw
Chapel
Yard



JOHN NUTTALL
4314 ALTAMIRANO WAY February 8th 1959
SAN DIEGO 3, CALIFORNIA

My Dear Martha;

We are so sorry to hear from Grace that you have a sprained ligament to tie you down, but we hope it will heal quickly and that you can enjoy a trip to Texas soon.

As to my second volumn there is no such thing but I guess I talked around it enough circles to maybe give such an impression; what I am now sending to you is only a continuation of this first part of my letter.

A couple of weeks ago I started off fine but when I stopped to read it over I found there was entirely too much me and too much trivia and threw it out. When I pondered the question I realized that there is very little that I could say which would be of any interest to anybody but to you and Grace and myself; we three have mental pictures of Whitcombs Boulder and such places as a background or stage setting to act as illustrations for whatever may be said. To all other people without the mental pictures, every incident will fall pretty flat and seem rather pointless; also there was not enough of general interest to form any sequence for any kind of story.

In the pages which I send, I have tried to sort of scrape the bottom of the barrel so to speak, to tell those things that happened before the memory of you and Grace, my memory being three years older than Grace's; there seems no point in telling you things you already know or that you remember.

The enclosure is simply a letter to you two for your momentary possible enjoyment and worthless beyond that, therefore I did not bother to make any carbon copy of it. You can show it to Grace and then it has served its purpose, but she will likely want to put it in with her general memorabilia.

Thanks to you and Grace for offering to pay for copies of my booklet; that has been charged to my greatgrandchildren if such there may be, and the few extra copies that were made up cost hardly anything additional.

JOHN NUTTALL
4314 ALTAMIRANO WAY
SAN DIEGO 3, CALIFORNIA

Inasmuch as you said with apparent truthfulness that you wished nothing to be changed or omitted from my first pages I complied with your request; there are some pages I would like to rewrite for betterments but I decided to devote that energy and time to writing new pages.

In following your request to write everything that came to mind, I do think that there is a whole lot of no value whatever and so many statements that ought to be cut out if ever you should decide to do any mimeographing.

A few years ago Grace told me that Stobart was the man drowned at Nuttall and I claimed that he was not; while in Texas she dropped a card to again tell me that I was wrong in my account; maybe she is right but I know of no way that we can find out whom is right or wrong. To avoid any trouble I would like to cut out that entire episode, since it is questionable and wish you would do so unless you have any good reason for leaving it as it is.

We both send our love to all of you

John

This is being written in response to the request of Martha Taylor and Grace Himes that I tell whatever remembrances I might have of the people, the events, and the daily lives of the citizens of Nuttallburg in its early days.

As soon as John Nuttall got this mine going in 1873 he had W.H. Holland as bankboss, Fred Rothwell as store manager and his own son-in-law Jackson Taylor as bookkeeper, all four of them born in England, which fact drew a lot of English miners.

Within another year there were ^{four} ~~four~~ distinctive groups working for him; The native citizens who lived up on top known as the mountain folks, the colored people who lived down at the bottom, the four German families who also lived at the bottom but who were tightly knit with their own customs and living habits, and the Englishmen.

The Germans Zwilling, Kossuth, Nordstrom and Matson worked only long enough about 20 years, to save up enough money to buy and equip a farm on top, everybody else remaining in the mines all the way through.

Matson bought a farm across Fern creek back of the Taylors summer residence Homefield, and became the butcher for the neighborhood as a side occupation while Nordstrom bought next to him and Zwilling found what he ^{wanted} ~~found~~ a little farther back on the turnpike.

All of the white workers also wanted to own their own home on top which almost of them did acquire slowly, but they wanted only a small place for their old age when they could no longer do any hard work. They first bought from 5 to 15 acres from the farm of a native citizen or from J.N. at \$1 an acre, then during their working years they gradually got a house built, a garden ^{plowed} ~~plowed~~ up, fruit trees chickens cow and horse and stable.

J.N. was bitter against saloons or drinking and whenever he sold a man a piece of surface he exacted a promise that they would never allow a saloon on that land; those men kept their promises and since the native citizens were also apposed to drinking there never was any saloon.

However it had to be admitted that all Germans considered beer as being necessary to life and the four German families were allowed to order a keg of beer every payday but they had to keep it quiet and strictly to themselves. Another concession to the Germans was a long fat roll of Bologna carried by the store, a queer concoction that nobody else would think of even tasting. The colored people only ten years out of slavery were very courteous, honest, industrious and religious and they enjoyed life far more than anybody else; they quickly got J.N. to assist them in building a church, buying music and instruments for a band, then a building for a lodge.

Only three of them ever established their own home on top; they were having too much fun ⁱⁿ ~~at~~ the community life at the bottom for one thing but the main reason was that they could not resist the temptations of the store and never could save up any money.

The rear end of the church was on the ground but it was so steep that the front end was six feet above ground and every payday the church would hold a festival underneath their church, to raise a few more dollars against their debt. Since J.N. was the creditor he cooperated by ordering a bunch of bananas and a freezer of icecream which he assigned to the church at cost for them to sell at retail and the store then redeemed what was left over. The women would bake cakes pies and cookies and all children white or black got a dime to spend at these festivals which were largely and principally an excuse for a social gathering; it was maybe 1898 before the debt was finally paid off, leaving no good excuse for any ^{regular} more/festivals.

Preacher Hubbard was a miner six days a week and content with the Sunday collection plate as compensation for his sermon.

1891

When the Keeneys Creek branch railroad was assured at the end of 1891 and Fred Rothwell certain of his lease, he sent for his brother Herbert to come to Nuttallburg and learn how to take Fred's place as store manager.

It was 1895 before Fred could spare one of his new houses for his bachelor quarters, then J.N. started a house for himself 100 yards up the hollow back of Fred's store and moved into it at the end of that same year. This house was the same as all other houses except a little larger with 8 rooms, everything perfectly square with no trimmings offsets or extras, but when J.N. drew up his will the lawyer apparently wishing to flatter him, referred to this house as being a mansion.

Fred's house was what you might expect for a bachelor, a bearskin rug beside his bed, two foxskins hanging over the back of a chair, a coonhide and pair of Hawk wings tacked to the wall, three English pictures of a racehorse a trotter and of a coach drawing up to an inn. In one corner was his English saddle, also his ^{new} bridle, while on his table were pipes and tobaccos; he also bought a fine riding horse and a blooded English bulldog.

One day when a man admired the dog and Fred remarked that the dog could lie his weight in wildcats, a third man whose dogs had once tackled a wildcat, disputed that statement with the ^{final} result that a cat and dog fight was announced to be staged on the coming Fourth of July. This fight drew a crowd such as had not been seen since the old public hangings which had been abolished or rather, transferred to the privacy of the state penitentiary.

In the early days murderers were publicly hung in the county in which the murder had occurred, as it was thought that the sight of the terrible penalty would be a forceful reminder that man must not kill his fellowmen, and the hanging ought to be a good deterrent.

Those hangings were the biggest events of any year or of a lifetime for the citizens who flocked to Fayetteville to camp in the surrounding woods or old fields. Even if a man felt that he himself needed no reminder of the laws, he would pack up and go because the sight might be a good lesson to his wife and children. Instead of being a deterrent those hangings maybe worked adversely; if spectators saw two wicked men fighting, they were slow to interfere because if they stopped the fight, then the whole county would be deprived of the fun of the gathering and seeing the victor hung.

The man who had differed with Fred, trapped a wildcat on Brackens Creek and Fred built a platform enclosed with chickenwire, for the big fight. The dog had all the courage/^{Fred} had claimed but did not have enough room for his tactics of circling, running in then backing off; too often, when he wished to back off, he got stopped by the chickenwire behind him.

When it became evident that the cat would be the winner, the men used sticks on hand for that purpose, to pin the combatants in ~~a~~ corners, then called the dog out. Next Fourth they would build a larger arena on the ground to give the dog a fair chance, but the women hollered and it had to be called off, therefore Fred directed his energies into organizing a big celebration to be held at Winona on the next Fourth.

Pairs of men were stood up to have their adjoining legs tied up in one sack for a three legged race; they had wheelbarrow races with a man of approximately 150 pounds for a load; a well greased tall pole with a free ham tied to the top and an equally greasy pig free to its catcher, while the women had a race with a potato on a tablespoon.

Another big feature was the Nuttallburg band proving the benefits of long practise and inborn enthusiasm.

Having so few opportunities for any celebration the people made the most of what they did have, and the Fourth was a big day with fireworks everywhere, and at one time my father heard of and ordered a paper balloon for me.

This balloon when unfolded was seven feet high and five feet wide with a basket six inches in diameter packed with excelsior soaked in some chemical which, when ignited, filled the balloon with a gas to carry it up.

At dusk we set it off to soar about 1500 feet which put it some 500 feet above the top of the normal ground above the canyon; the populace had seen pictures and read of real balloons but had never heard of a small paper balloon, therefore when that thing was seen high up in the air, all eyes transferred ^{it} ~~that thing~~ to the brain as being a real balloon, appearing small because so high above ground.

Next morning there were a lot of startling reports; one man reported ~~only~~ that a big balloon had passed across West Virginia; another reported that the basket was so brightly lighted that he could see a lot of people leaning over the edge looking down; another report was that, as the balloon passed it caught afire and one man jumped out with his clothes all ~~afire~~ ablaze. This last report was no doubt a sliver of the burning excelsior falling off; Next morning the balloon was found to have drifted down to land at Firecreek seven miles upriver, after its fuel had all burned out.

Going back to the public hanging gatherings, all farm wagons had brackets on the side boards; the farmers cut hickory withes about twelve feet long to be bent above the wagonbed with each end pushed down into a bracket on the two opposing sides, then bought the big canvass top to be throw over the framework and tied on the sides to the brackets.

The canvass was long enough to be pulled together at the ends, ~~arranging~~ ^a replica of the covered wagons of the West except smaller; when the wagonbed was filled with sweet hay, the family had a snug abode inside for rainy or for chilly weather, also for sleeping at night.

It was about 1877 when J.N. married Martha Blume, maiden daughter of Jake Blume whom J.N. had appointed verbally to be his land agent, and he brother Charley was then given a job as clerk in the Nuttallburg store, in charge of that corner where they sold medicines, tobaccos, spices, all bottled goods and he had access to the bunch of bananas hanging on his boundary line. Some fifteen years later his eyesight began to fail; if you made a five cent purchase and tendered a three cent piece he would presume it was a dime and give you a nickel in change; this bonanza lasted a whole y

or maybe longer until Herbert Eothwell the manager heard about it, and put a pair of specs on the mother lode.

Unclee Charley had dreams of making bigger money than the salary of a clerk, and one day he read in the Pennsylvania Grit about how goats could live and multiply on almost any kind of food, to produce hides and meat with no expense to the owners of the goats

The Grit being almost the only publication with features and pictures was very popular all through West Virginia, almost the only publication to which the masses subscribed.

Uncle Charley bought two pairs of goats which he turned loose under the cliff after putting a gate across the bottom of the ramp over which the county road got from the top of the cliffs to the bottom. This gate was against the law but nobody filed any complaint, because they were all interested in this project and curious to see how it would work out.

The goats did multiply, but there was no way to have any round-up in that jungle of boulders fallen tree vines and bushes; the terrain was so nearly impassable that a man could not even carry a goat out of there if he shot it so the gate was removed and the goats allowed to disperse for anybody to catch or shoot them if they wished to do so, one by one as seen.

About 1896 Uncle Charley read an ad about some land for sale at ~~Rock~~ ^{Front} Royal ~~West~~ Virginia, with real gold in its soil, free for the panning; this sounded too good to be true but the owner wrote back an absolute ^u guarantee and Uncle Charley went to investigate and found the claim to be perfectly true. Ignoring the pleadings of everybody at Nuttallburg, he could not pass up the opportunity to make bigger money and ~~he~~ invested all he had, to buy that old farm. It was true enough that the sandy soil contained gold but he and his only child George had to work a long hard day to pan a dollars worth of gold they then had to try to make a living by farming but it was poor soil for that, and ~~his~~ his sister Martha had to support him from her \$5000 annual stipend until George became old enough to take over.

The sand of our seashores contains the same gold, not enough to be worth the costs of obtaining it, but there is gold in it, ~~alright~~.

One of the things that George did in his attempt to make a living was the selling of cook books; he came to Nuttallburg in 1909 for this purpose in 1909 and we still have one of his books.

The store at Nuttallburg with its large center customer space and a stove in the middle was the heart of the village for social gathering as well as for window shopping looking at the treasures which someday we might be able to buy; the pocket knives, watches, rings, stickpins, cuff buttons, shotguns, rifles, shirts and neckties.

Everybody gathered to await the sorting of the mail from the west which arrived at 6.45 P.M., the postoffice being in the corner of the store opposite Charley Blume's corner, with father as the official postmaster. He served under Hayes, Garfield and Arthur, should have been displaced by a democrat when Cleveland got elected but nobody else applied for the job, so he served on through Harrison; when Cleveland was elected the second time in 1893, a mountain man applied and got the job, ^{Nov 1894} and the government gave him a little building down by the station as postoffice, finally discontinued not until 1957.

The store designated one day a month to be Mountain day, another Nuttallburg day and the third as Keeneys Creek day; all orders placed on these days would be delivered free to the homes, by wagon and teams hired from the native citizens on top. All women from each locality would come to spend the day at the store on their designated day, bringing with them anything of their own handiwork of which they were proud, a shawl, bonnet, pair of knitted gloves or a new baby to display and receive admirations, and they would cheerfully give their friends instructions on how they could produce the same thing themselves.

With a covered porch running clear across the front of the store, and the large inside area, there was enough room even on rainy days, and if a clerk laid three bolts of curtain material on the counter for Mrs Louis Meadows six other women could have the fun of helping to choose the best bolt.

There was a day when a Keeneys Creek woman could not come and sent her order by her little boy; she could neither write nor spell intelligibly and the clerks could make nothing out of one item except that it said one yard of pork. Herbert told it of John that when he was packing her order into boxes for the delivery wagon, he filled that item of the order by sending three pickled pigs feet.

John began clerking in the store about 1893 when he was turning 20 and became manager in September 1897 when Fred died and Herbert went up to become manager of Fred's mine.

The store had a lot of customers and netted around \$15000.00 a year; they charged only the same markup used by the competitive city stores but forged ahead by having no sales or bargain days which were unnecessary because of no competition. If a betterment in some article would immediately make the old stock obsolete, the city stores had to hurry up with a sale of the old stock at cost to get rid of it; the company stores did not order the new thing until all of the old had been sold at the regulation price.

The cellar of the store was an intriguing dark dungeon with stone walls and iron bars across its two unwashed windows which were under the porch; there were casks, kegs, barrels and hogshead of vinger, syrup, pickled pigs feet, salt pork, the sowbelly that made all vegetables so tasty, dill pickles, Kerosene and lard oil. There were bins for potatoes, apples, onions turnips and cabbages, with the Bologna and hams hanging from nails, with Harvey Pierce as handyman to go dōwn and get the orders for those things below.

When the Taylors bought the old Alex McVey homestead to become a summer home for the Taylors seven children, in September 1894, uncle Jackson thereafter rode horseback to and from his days work but John Walked.

My parents had a sense of guilt because I was an only child with no playmate and they eased their conscience by allowing me unusual freedom in visiting with no regard for the convenience or the wishes of the hosts; I spent so much of my time visiting the Taylors that I felt we were all one family burdened with a superfluous extra pair of parents to watch and to curb us. Up at Homefield in summer, John would read to all of us for an hour right after supper, one of the books being David Harem; at the end of the hour he would lay that book aside and pick up the Bible to start the evening prayer

After reading a random chapter, we would all get on our knees, put our hands over our closed eyes and lay our heads and hands on the seat of our chairs; Andrew, six months younger than me, and I would use an opening between two fingers to keep one eye on Ernest who was always at his best in prayer. If John said anything that could be mimicked or pantomimed Ernest would do so and set Andrew and me into giggling that could be only partially concealed; ~~laughter that could be concealed only with a~~ when we heard a distant cat, Ernest twisted his lips into such unmistakable meows that you could almost hear them. Whenever aunt Martha looked around to reprove us, Ernest always had his eyes in communion with God, tightly shut, leaving Andrew and me as the only heathen offenders.

When the C&O was being surveyed, the grade ran into a large boulder two miles downriver below Nuttall, too big to chew up with the equipment of that day, but they were able to shift the grade to brush the upper edge of it. In a past age the river had washed out under the lower side of it, a space, where about eight men could get good shelter from the elements; and a quarter mile downriver the C&O had a watertank beside Fern Creek where the freights and local passenger trains filled their tenders with pure water. J.N. bought all the watershed of Fern Creek with only Stroud and Judy living on it and their houses were too far back to drain into it, therefore its water was always pure and its virgin woods kept it from drying up in fall. Tramps soon learned that the under side of Whitcombs Boulder was a good place to spend the night and it promptly became a hangout for them; it was named in honor of the chief engineer of the survey.

A couple of tramps held up a pedestrian one day and threatened another one, then we got garbled reports about dead bodies found at Whitcombs Boulder, so that it became a fearsome place, especially after dark.

The C&O had a trackwalker who patrolled from Sewell to Hawksnest every night a 20 mile round trip but easy enough to do in ten hours; the patrol was to see if any tree or rock or slide might have rolled on to the track in this steepest stretch of the whole New River canyon.

The trackwalker did not like Whitcombs Boulder any more than other people and he carried a pistol on his lonely walk; one night upon his return, arriving at Nuttall about 4.30 A.M. he stretched out on the ground to lower his head to get a drink from a spring directly below the Taylor house, and his pistol dropped from the shoulder holster, the hammer hitting a rock to kill him instantly. Another argument that it seldom pays to carry a pistol.

in the fall of 1894

My first governess/was a Miss Parks from Cottonhill, nine miles down-river and since she and John Taylor enjoyed each other's company to a normal degree, he would often go down to Cottonhill on #13 Sunday afternoon, after her term had expired, then walk back home after supper since the upriver evening local train did not run on Sundays.

Once a month on a Saturday Fred Rothwell would take the Keeneys Creek hack down to the Keeneys Creek station to catch #13 to go to Charleston for the Kinght Templar or Shrine meetings, sleep until noon Sunday then take # 2 home Sunday evening. Fayette was a flag stop for the county seat and Fred would get off the fast train at Fayette then walk to Nuttall to spend the night with his brother Herbert who occupied the room on the second floor of the store, formerly occupied by both of them before Fred went to his mine.

As Fred was approaching Whitcombs boulder upon one of his returns, he got the idea that it being such pretty weather John would likely have gone down to Cottonhill and should be coming along any minute now; peering around the Boulder and seeing no fire then going on down to make sure there were no tramps under, that night, Fred sat down by the track to wait for John.

When he did soon hear John coming, he got behind a smaller boulder to protect him from any possible pistol, having the idea that if he pretended at first to be a tramp, John would be doubly glad to have his company when he learned that it was only Fred and no tramp.

When John came abreast Fred yelled "hands up" with a disguised voice, but/h did not get John's company; John arrived home ahead of Fred.

as Fred told it

Starting in 1908 when I so often walked past Whitcombs Boulder on my way to or from Fayetteville, I seldom saw any tramp, because the C&O had stopped using the Fern Creek watertank except for the shifters that handled the coal mine cars, or an emergency for through trains.

One morning when starting for Fayetteville, I was well on my way when I discovered that my Collie was following me and since he refused to be driven back I had to yield to him, then he joyfully ran ahead. The roar of the river drowned out the rattle of a train coming downgrade doing no puffing and if the ditch was too muddy I walked on the end of the ties; as we were passing Whitcombs Boulder I felt the quiver of an approaching train and hopped off calling a warning to my dog. He stopped to look around but the train was too close for him to jump off and he decided to outrun it which he almost did; the train had slowed to ³⁵36 miles for the sharp turn at that place and the Collie was going about 20. With his heavy coat of wool and the collision being at about 15 miles per hour, the cowcatcher tossed him well below the track but did not kill him.

When I went down to him, I was much surprised to find five crude graves and I thought it no wonder that the place had a bad name; after a lot of enquiry I learned that the former/^{C&O}section gang had been commandeered by the county to bury all bodies found at that place that had no identification.

One was a tramp who ^{9.67}cut his head cut off when he slipped or stumbled in getting on or off some freight; another was a tramp found dead of natural causes as he slept under the Boulder; another was the body of somebody drowed upriver and washed ashore ~~at~~ at this bend, and I forget the other two.

If you have a desire for any skulls you can probably find them about 40 feet below the track and about 200 feet west of the Boulder, at the only place close by, where there was enough ground for five graves.

In this same summer of 1895 John had another ^{disturbance} ~~disturbance~~ when uncle George McGaffey came to Nuttall to see the new branch railroad.

At the point where the upper grade of the branch had to make a sharp turn from the canyon around into the Keeneys Creek hollow there was a prominent sharp ridge with a wide deep hollow on each side; the curve was made in the deep cut through the ridge with a high bridge on each side of the cut.

John and Herbert took uncle George for a walk up to the big bridge and as they stood in the middle of it enjoying the view up and down the canyon the shifter came through/ ^{the} cut ^{until} unseen/it was at the end of the bridge and because of the sharp curve the engineer had been unable to see them.

To get out of ^{the} way immediately, the first thought of John was to hang from the end of the tie he was standing on, with a 30 foot drop on to rocks below him if his grip gave out; The other two decided to outrun the shifter ~~xxx~~ ^{which} uncle George succeeded in doing but Herbert saw he could not make it and had to take the risk of clearing a five foot space to land on the hillside on the upper side of the bridge. Herbert just did clear that space and grab a bush to keep him from sliding down through that space to the rocks below, but he had such a close call that he never again was able to walk across any bridge or trestle except in utter ^{misery.} ~~terror~~

My second governess was Edith Stobart of Meachums River, Va who started off alright but in the middle of the term her brother got drowned and she wept all the rest of her term to make us all most uncomfortable; we feared to say anything or it might start her off again.

Her brother was riding downgrade on a handcar in Virginia too fast to make a curve and it jumped the track pinning him face down in the ditch which had little more than a foot of water in it but that was enough to drown him; ~~xxx~~

~~was about March 27 1872 the Cox had been completed on the south side~~
~~Enz 1872~~ When they were at work on the south side one of the engineers asked me one afternoon where could he find my father, that he wanted to borrow his boat which he had for botanizing on the south side. I took him to the office then coaxed until my father gave his consent for me to go along for the ride but the engineer did not want me; he had a long letter from his girl which he wished to enjoy all alone as the boat drifted with the current.

Below the ~~xxx~~ tipple, a great mass of boulders dammed the river to such extent that only a portion of the down current could get through; the current coming downstream hugged the north bank to hit the dam a trifle sidewise and fully half of the current, unable to get through the boulders got shunted aside to create a current upstream to the top of the long pool. The boat tied at the mouth of Short Creek at the upper end of the pool could be pushed into the down current for a free ride until close to the rapids, then a few good strokes on the oars would put it into the up current to xdrive on up to the top of the pool where the down current would get ahold of it, for a 20 minute free ride enjoying the scenery.

The engineer persuaded me that I would have more fun exploring up Short Creek than in the boat, pushed it into the down current then began reading his letter; trees and boulders hid the near side of the river from the village and it was Mr Tully up at the drumhouse who happened to be looking down at the river when he saw what appeared to be a boat shot up into the air in the rapids and something like a man fall out of it.

The engineer had failed to pull over in time and had been drawn into the rapids of the dam and of course father supposed I was with him; they could find no bodies there or downriver, and I got a warm welcome when I showed up for supper.

They sent for a diver to see if he could find the body which had evidently become jammed between two of the rocks, but the diver got jammed too and they could not pull him loose; they then blasted to get what they could of either body but I remember nothing as to what they did get, as I was not allowed to go near the river for the next year or so.

The public school had a term of only five months with a teacher of dubious ability, therefore my parents and the Taylors had to have a governess and my third one was Annie Austin of Lewisburg who stayed two years; it must have been a sore trial for two strange women to be under each others feet every hour for nine months.

In the fall of 1893, the public school had a good teacher, Letha Huddleston and we all attended her school and I think that the parents paid her to stay on for the remaining four months of a normal school term.

Whom the Taylors may have had for governess after that year I cannot recall except Neva Mercer and maybe she was the only one; she was loved by everybody and so thoroughly congenial that if they did get her as early as the fall of 1894 they would never have wanted anybody else after that first year. I can clearly remember being very envious of the Taylors and of keeping myself informed as to when Neva might take them for a walk, so that I could be on hand not only for the walk but for the honor of it coming my turn to be taken by the hand to walk beside her for a spell.

A walk in spring or summer was a joy to a child because of the mass of wild flowers that could be gathered; all of them growing to unusual size in the rich soil of the canyon and encouraged by the ~~max~~ millions of rocks which would absorb the heat of the sun then hold it well into the night.

There were trilliums, jack-in-the-pulpits, anemonies, hepaticas, violets of a dozen kinds including the large dogtooth, bloodroot, the wild carrot called Queen Annes lace, the wild onion called a ramp, red paint brush, phlox, aster and something along the tracks called bread & butter, wild iris and fully a dozen other things the names of which I never knew or have now forgotten. Nature was also prodigal in its food but strangely so many of the store-houses were in definitely limited narrow belts not close together; persimmo grew all along the riverbank at exactly highwater mark, then nowhere else until you got back to the turnpike. Pawpaws grew in a narrow belt that ran through our village and nowhere else except a few along the creek on top; elderberries grew only along the tramroad; huckleberries in profusion all along the top of the cliffs but none in the canyon; chinquapins along the top of the little ridge 200 yards back of the cliffs, a grove of a dozen black walnut trees on top over next to Fern Creek; chestnuts plentiful on top but none in the canyon.

The only wild strawberry patch large enough to be worth visiting was at Whitcombs Boulder, where you could get a pint of fully ripe berries at each visit in season; the wild raspberry, known as thimbleberry grew in odd patches of two to five bushes, at random, blackberries everywhere, followed in season by the dewberries which grew on groundrunning vines, almost the same berry but seedier, smaller and not quite so sweet.

The wild grapes and larger scarcer fox grapes, sweetened instead of damaged by the first hard frost, grew where you could find them after scouting; plenty of beechnuts but it consumed three calories of energy to obtain two calories of nut from those misshapen tough shells.

In the canyon there were only three butternut trees that I knew and no hickory nuts; the cliffs were a most definite boundary line for so many things, with plenty of teaberries and groundrunning partridge berries, some hazelnuts on top but none below; arbutus on top but none in the canyon. Lightning never struck below the cliffs, no rattlesnakes and only rarely did a bird of prey including the owls, ever make a visit below the cliffs, then hurried back up.

Nature would almost support a family if it settled down then roamed around to locate the scattered food sources and there was plenty of meat and fish in addition to the nuts berries and fruits.

In the booklet I told of how they caught wild turkeys; they dug pits to catch their bears, laying rotten branches across the top then scattering leaves on the branches to completely hide the hole then some bait suspended from the limb of a tree directly above the hole. The Allegheny black bears were not the kind you dream about, - they were only about $2\frac{1}{2}$ feet high and 4 feet long but valuable to the pioneers as a principal source of fats, ^{for food, greases} ~~axzzzgzeeze~~ for leather or axles and tallow for candles or for soap. The woods had so much underbrush that it was difficult to get a shot at a bear and if you did shoot one, you would likely have a long way to carry those 200 pounds back home therefore many pioneers dug a pit near their cabin not only for the short carry but also closeby where they could look at it regularly.

At the east edge of the Geo Alderson farm the turnpike passed right beside a cliff about 15 feet high known as Spy Rock which is the eastern and northern corner of the Fayette rock seam, it having been cut and undermined by Keeneys Creek to the east and by a fork to the north, so that it is no more beyond this point, except under the higher hills. Some imaginative writing traveler on the turnpike wrote an article about his journey and gave this cliff its name of Spy Rock falsely stating that Indians and then pioneers used it as a lookout station. Standing on this rock a man as a lookout would be easy picking for anybody hidden in the surrounding woods, nor could he as a lookout see anything at all but a dense mass of tree tops that hid every trail and every foot of ground, also every stream. The name had appeal and all stagecoach/travelers who spent a night at the Alderson tavern would walk over to Spy Rock before or after supper and it became a famous turnpike landmark on a par with Locust Lane. About 500 yards south of Spy Rock at the base of the cliff's was Turkey Spring the most ideal spa that a turkey could ever hope to find, with a good flow of water and a nice pool scratched out for bathing. The cliff was too high for any wildcat or fox to pounce on them from above and the ground dropped off below too steeply for any pouncing from below; it takes a turkey several seconds to get its heavy body clear of the ground when alarmed but at this spring all they need do was to spread their wings and jump out over the steep descent of the ground which started at the edge of the pool. When the first pioneer discovered this spring he had easy picking to slip unseen and unheeded to the top of the cliff and shoot down; when Alderson cleared the lands above and the turkeys became killed or scared off the water flow dwindled and the pool began filling up so that when I saw it there was not so much left of it. About 400 yards down the steep hillside to the north from Spy Rock there is a most unexpected and unusual crevice, with trees and bushes growing up to and overhanging the edges so that if dogtrotting downhill one could easily step right over and fall into it if not watching closely.

Ages ago this northwest fork of Keeneys Creek cut through to expose the face of a rock seam which I guess to be the same seam which is a river pali-
sade at Cottonhill, below Hawksnest. A section of this seam ~~xxxx~~ about 15
feet wide and 100 feet long broke loose at the eastern edge and slipped maybe
15 feet away but stuck there and during the many centuries, soil built up to
entirely cover and smooth over the cliffs leaving a crevice about 15 feet wide
and 15 feet high and 50 feet long with a rather steep eastern descent into it.
When Geo Alderson discovered this crevice which had a good spring in it, he
put a gate across the descent and used the crevice to isolate any farm animal
such as a cow that was about to calve; he could take a sled load of hay down
to toss it over into the crevice.

Having slaves to do the work, Alderson had two bear pits and one day when a
slave reported a young doe in one of the pits they tied it up and took it to
the crevice since they were not then needing any venison. See back of page.
When the courting season came along, two bucks had no trouble jumping the
gate downhill to get into the crevice but could not jump it back uphill.
I have heard that story told of another man in another place but such a thing
could easily have occurred in many places and Alderson did have a perfect
setup for it. During the Civil War both responsible and irresponsible bands
of soldiers would come along the turnpike commandeering or stealing the stock
of the settlers and whenever a stagedriver told Alderson of such a band being
on the road he had a perfect place to hide his stock.

A.J. Witherow had a gristmill on Keeneys creek at the Chestnutburg road
ford and when J.N. bought his patent and started the branch Mr Witherow bought
land away back on Meadow River close to the Rader ford on a road that left
the turnpike 2 miles east of Ravens Eye and went on over into Nicholas Co.
Here he set up a new gristmill with an ingenious backwoods sawmill attached
by a shaft to the axle of the big waterwheel; at the far end of the long
shaft, a long saw was bolted to stand upright, then a scaffolding built to
stand at the top of the saw.

It was a hard job digging a bear pit trap down among the roots and rocks and then after all that work the pits would/prove to be little good because of poor drainage; heavy rains would nearly fill them and the water would stand there for months, therefore I suspicion that only the slave owners had them. Geo Alderson probably had his second pit because his first one did not drain as it should, although I suppose a slave could have bailed it out in a half day.

Back of Locust Lane there was a pit that must have been abandoned at an early date because it had filled up with dead branches leaves and the dust of the winds before the bears got killed off. Although filled almost to the top it held enough water to make it a mudhole ~~wherein~~ which the bears then used for a wallow; the evidence of this could be seen in the surrounding trees where the bark was all clawed. Just why they stood on their hind legs and clawed at the trees after a mud bath I do not know, but the shredded bark at 5 or 6 feet above ground was proof that they did claw the trees.

A log was placed on this scaffold on a truck with a heavy weight hanging down from the end of the truck to keep it pulled against the saw; as the waterwheel turned ever so slowly that saw crept up, then back down and by evening a board had been sawn from the log, then the log pushed over another inch for another board to be sawn off by morning. It was mighty slow motion yet he could with little effort, produce enough lumber for a ~~small~~ house each year and get good utilization of his waterwheel all year.

The patent calls of his Keeneys Creek land being hopelessly wild, I made the all day journey to see if he could help explain any of it and spent the night with him and as always I spent the evening discussing trees and corners and he said he knew ^{the nearest} ~~a~~ corner of the Sewell Mt lands and kindly offered to show to me next day. It was late fall when the creeks were low and on our way back we followed Laurel Creek and whenever we approached a pool where the light was such that we could see into it, we saw trout darting under rocks to hide; when he asked if I would like a mess of trout for supper I said yes but had no idea how he was going to get them. We walked along until he found what I wanted in a pool, a flat rock about 3 feet in diameter with its top at water level or a little above, resting on a couple of other rocks thereby providing a good trout hiding place underneath. Picking up a rock that weighed about 80 pounds he dropped it on the flat rock, then reached under to get three trout which had been temporarily but completely stunned by the concussion.

There were times when I saw the remains of a glass bottle or a jug in a pool which was another method of getting a good mess of trout; they would put lime in a bottle, add water and cork it tightly after having tied a rock to it to hold it down. The gas generated by the water and lime would explode the bottle or jug to stun all the trout in that pool and kill some of them; when they did this instead of using hook and line I do not know excepting it was evident that it was a whole lot quicker and also saved a lot of walking.

Tobacco being the money crop of Virginia, most/the north Fayette settlers had high hopes of raising some tobacco to at least obtain the cash for their tax bills and a few other necessities, and half of the old farms had the remains of their old tobacco barns, or drying sheds, some still standing some caved in some burned down leaving only the foundation rocks.

Richard Foulke with a rather high social and financial standing in Phila had two sons who were just a little bit queer and of no benefit in Phila and it is possible that they were the reason why he bought a number of Warder & Parker patents between the Pike and Meadow River back of the Nuttall leasehold, for a total of 8000 acres. The two sons who were intelligent and only had one screw loose came to Fayette to raise tobacco and having plenty of money they were able to hire local citizens to clear a large field, set out the plants and attend to them. They made money the first year, soso next ye and all was going well the third year until it became evident that a frost was likely to hit too soon; they hired the citizens to gather wood and brus to stack it up in great piles all around the field with other piles ^{for} replishment. One night at bedtime it appeared that a good frost was hitting and the men were called to start the fires; this was the first time anybody in Fayette had heard of such a thing as smudging and they all believed it was originated by the Foulkes and so far as I know maybe it was but I doubt it. The fires did save the tobacco around the sides but the center was ruined and the years effort ended in a loss; the Foulkes like almost all the other had to give up because it too often happened that frost hit before the tobacco was ripe, and also it was not good tobacco land in the first place. It is generally true that if nature has grass growing in an area then that land is suited for raising grasses which include the grains; if hemlocks grow in a hollow and hickories grow along the top of the ridge, seeds carried from one place to the other by winds or by creatures will not grow to maturity in that other location; land covered by trees is most suitable for tree

Page 20
The older Foulke brother adopted rattlesnakes for his hobby; he would pick one down with a good forked stick that he carried, pick them up by the back of the neck to dump them into a sack, he having had made for him some elbow length gloves of heavy leather to protect him from the strike that the snake could sometimes make when let go in the sack.

On his frequent visits to Phila he would take a box of rattlers with him but nobody knew why; he might sell them to medicine wagons or to snake oil manufacturers, but Pennsylvania had plenty of bigger and better snakes of its own. It was told that on one visit, a mama rattlesnake gave birth to ten young who escaped through the air holes in the box in the backyard, scattering into neighbors yards and spreading consternation throughout that whole district. It was just one man who told me this about the older brother and I cannot guarantee his accuracy but I repeat it as a bit of local Foulkelore.

The younger brother Wm had taken a woodworking course at the Drexel Institute where he had learned how to fashion a violin and he spent all his days in making violins, each from a different wood, wild cherry, birch, black walnut, apple; commercial violins are made from maple or pine.

William never went anywhere without his violin in its case, never mentioning violins but always hoping somebody would ask to see his latest creation, but nobody ever did ask because we all knew that the case also contained private papers toothbrush and socks. You would think that after his years of loving work in making those violins he would learn to play one of them but he did not play. When I went to see him about some common corner trees, I asked to see his violins and the pride he took in each of them was pitiful because so few people ever showed any interest or even asked to see one of them. We became good friends simply because I honestly said I thought they were beautiful and whenever we met thereafter I would ask to see the latest which he would have in that case even the case did also serve as suitcase.

The Foulke brothers lived with Gus Bays whose farm was near the middle of the Foulke lands, neither of them ever marrying.

It was in the year of 1850 that some Virginian financiers took out a charter for a railroad which they hoped to build up the James River, over the Allegheny, down New River and on to the Ohio.

Jacob L. Blume was a farmer and saddler living near the turnpike ford across Keeneys Creek, his brother Morgan having a store a mile west near the Alderson tavern; in 1852 when the proposed railroad had made a real start, these two brothers using some good foresight, decided that it ought to be a good investment to buy lands fronting New River along which the railroad would come. Year by year as they could spare the few dollars cash, they patented all untaken lands from Keeneys Creek down to Fern Creek with Morgan going or west downriver below Fern Creek; they also bought the patents already taken out by others. The brothers after a long wait sold their holdings to J.N. but he wanted nothing west of Fern Creek, leaving Morgan stuck with several hundred acres; these patents that Morgan owned and ^{those} that J.N. bought interlocked along Fern Creek.

As soon as Morgan learned of the big profits in coal mining he naturally had a desire to mine his land but knew nothing at all about how to proceed.

When J.N. married Jake's daughter about 1877, he took his wife's uncle Morgan under his wing so to speak and agreed to tell him how to proceed to open a mine, then went down to Fayette Station almost daily at first to supervise the work and I guess you could say that he really opened that mine.

Wm Masters an intelligent citizen born and raised at the head of Brackens Creek had started to work for J.N. at the beginning in 1870 and in a few years learned all the particulars of how to mine coal; J.N. let Morgan have Wm Masters to be his bankboss for the new mine named Fayette.

In 1884 J.N. and Morgan executed a deed whereby each granted to the other whatever lands they owned on the other side of Fern Creek making the creek their boundary line, with Morgan getting the best of that swap.

Morgan had a surveyor survey and triangulate the acreage in what was transferred to J.N. and ordered the assessor to reduce his acreage by that much, but J.N. took no action to have those acres charged to him nor did he have any survey to determine what should be transferred from him to Blume. Thirty years later when I got around to that problem I surveyed and estimated the acreage that J.N. had deeded, looked up the valuation and tax rate for each of the 30 years and found that J.N. had paid \$1200 in taxes on that Blume land and I am glad to say that Morgans son Ed refunded it without dispute.

In 1892 J.N. deeded to the Longdale Iron Co of Clifftop all surface land that he owned on their south side of ^{Manns} ~~the~~ creek but being averse to any surveying he did not estimate the acreage and he had no transfer made on the tax books. When I worked on that I figured that the estate had paid over \$3000.00 in taxes for the benefit of the Longdale owners, who were by that time the Babcock brothers of Pittsburg and they too refunded that sum without question. If A pays the taxes on the land of B, the title of B is kept perfectly good and since B did not ask anybody else to pay his taxes for him, anybody else who does erroneously pay those taxes can file no claim against B, which is to say that the Estate could do nothing at all if Blume or Babcock had said it was the estate's own fault and they would not make any refund.

Morgan only made his living from his mine because he had not enough money to pay the dead expense of driving entries with their aircourses, buying steel rails, mules, mine cars, building houses; when times were good he could not produce enough coal to pile up reserve cash to tide him through poor years, and too, his coal was 2 inches thinner than elsewhere and that reduced his profits even in good years. When he heard of the proposed Keeneys Creek branch he asked J.N. to give him a lease for a new start in the supposedly thicker coal, his plan being for WM Masters to go up there to open and run that new mine for him, as a minority investor in it.

J.N. promised him the first lease on the left, but when Morgan ~~was~~ ^{and} Masters ~~discussed~~ ^{discussed} the plan, Masters said he himself wanted to be coowner and they fell out then Morgan had to hunt for somebody else to join in with him.

A man named Boone had a farm midway between the turnpike and the village of Sewell and had six sons, Robt, John, Francis, Jim, David and Dan; Robert went elsewhere or died and I never heard anything about him.

By 1892 John, Francis and Jim had each in some way acquired a few hundred dollars and when they heard of the generous simplicity of the proposed new Keeneys Creek leases they had a hope that maybe they could get in on one of them somehow. By simplicity I mean that J.N. set no minimum royalty, allowing the lessee to merely do what he could in the way of production; if the lessee had little money, that would not matter, because he could proceed as slowly as he wished. The only restrictive clause was that \$1500.00 would have to be paid by the lessee if he did nothing at all for a whole year. When the three Boones heard of the Morgan Blume and Masters falling out, they went to see Morgan and he took them in as equal partners, with the Boones to do the work of opening the mine and Jim later became the manager, J.N. gave every lessee invaluable advice and assistance in getting their mines opened and with this particular mine Morgan Blume who now knew quite a lot spent much of his time up there helping the Boones to get started and teaching them what he knew.

When it came time to select a name for their new mine, Morgan was outvoted 3 to 1 and the name chosen was Boone.

This Boone mine was the only one on the creek that met no rock fault nor any other trouble and it was the only one that consistently made profits.

Francis used his share of the profits to buy a farm outside of Lewisburg and remained there but invested in the other later Boone mining ventures; John used his early profits to join in on and become manager of the Brown mine across the river from Nuttall.

About 1898 the owners of the Boone mine had enough ~~cash~~ undistributed cash to buy the lease at the northwest end of the branch, which had been given to a local storekeeper who had made little progress and in choosing a name for it the Boones yielded to Morgan and named it Blume.

Morgan Blume died before the papers were all executed and the Boones took in their brother David, made him manager and advised him how to proceed. Jim was now manager of the Boone mine, John at the Brown mine, Davey at the Blume mine and the youngest brother Dan came to work at Blume as a miner. J.N. gave his old friend Wm Masters the second lease on the right which was named Masters; and Masters took his son A.C. in with him as part owner. Being deadset against any surveying, J.N. affixed the boundary lines of the Boone lease to start at the mouth of Contrary Creek follow it up to the Chestnutburg road, follow the road down to the Keeneys Creek ford, then down the creek to the mouth of Contrary. There could be no dispute about those boundary lines or fallen corner trees; nobody had any idea how many acres might be in that boundary but that did not matter very much. The other ~~xxx~~ leases had no such convenient streams or roads to use and J.N. had to give in to their plea that the other leases be surveyed.

Jacob L. Blume had been very helpful to J.N. in knowing the corners and owners of all of the local patents and telling him whom to see to buy a solid boundary of 800 acres for his original Old Keeney mine, then another 1600 acres for his Nuttall mine. Mr Blume having an attractive daughter as well as a knowledge of the lands, J.N. verbally appointed Jake Blume to be his land agent with whom he would often have to confer, but it turned out that Mr Blume utterly failed to do the duties of an agent.

Blume was too busy ^{responding to the requests} ~~answering the calls~~ of other neighbors to give any attention to the lands of J.N. other than to copy the calls of a bought patent to a blank deed form and acknowledge the signatures of whomever appeared. Mr Blume bought the Locust Lane tavern in 1873 and was thereafter a tavern keeper, a farmer, a conveyancer of deeds, a Justice of the Peace, a saddle and a Notary Public and a surveyor.

Upon the death of Jake Blume, Geo Cavendish whose farm was on the cliffs on the east side of the Short Creek falls, was given an annual stipend to help look after the lands insofar as he could; apparently he took this appointment too seriously and overestimated his authority.

Over near Clifftop J.N. had bought the 600 acre Piercy tract in fee and I had seen the remains of the old house that had burned down by the pike; In surveying the tract I discovered a smaller newer house farther south on the Clifftop road, and knocked at the door to enquire what right it had to be there. W.H.Osborne showed me a written permit ~~signed~~ signed by Geo Cavendish authorizing Osborne to build a house on that tract upon payment of \$10 a year rental; no payments had ever been made and I stopped in each year to collect something so as to keep the estate title good. No payment has been made since I left Fayette ³ 53 years ago and Osborne's heirs have by now probably acquired quite a lot of that surface by squatters rights and by that written contract. When surveying the widow Amick patent over by the Meadow River cliffs I found a family living in the old house and upon enquiry they too showed me a Geo Cavendish contract renting the whole place to them at \$10 a year but nothing had ever been paid. This man Jonathan Eddy was rather poverty stricken with a wife and three little children and the lands worn out, therefore I never demanded the full \$10 a year and accepted only what he said he had which was two or three dollars, enough to be a payment and keep the estate title good. I liked Jonathan and was sorry for him; he did not acquire any squatter rights after I left because he got killed and his widow had to move out. In 1916 Jonathan Eddy was at Winona and got into an argument with young Bob Holiday the dispute finally reaching such heat that Jonathan called Bob and sob whereupon Bob shot and killed him. So far as my experience went, we all considered that epithet something we must avenge by a fight to the finish; Bob was the aggressor in the dispute but Jonathan should never have used the curse therefore my sympathies were not entirely all for Jonathan.

In the trial Bob could have got off easy but his convictions and emotion were too great for him to control and near the end of the trial some question hit him in a vulnerable spot and he loudly announced to the whole court that he shot Jonathan on purpose and would again kill anybody who called him that name and ~~refuse~~ who would not take it back or apologise for it.

This outburst gave the prosecuting attorney a perfect opening for saying that Bob was a dangerous man to be loose and then the jury found him guilty for a long term in the pen.

The motto of W.Va happens to be "Mountaineers always Free" and this fit in with the raising and feelings of Bob who wrote to me ~~223222~~ later telling me that the confinement was killing him and begging me to please get him paroled. I could have done it, but I thought of Jonathan's widow and little children and postponed taking any action until I could weigh the question more; before I made any move Bob died simply from the confinement and that has always hurt me.

The trial of Bob Holiday was normal but half of the Fayette criminal trials were a travesty on justice.

A misdemeanor is an offense punishable by a fine or a more or less brief imprisonment and a felony is punishable anywhere up to the penitentiary or to death; the law specified that jurors on a felony trial must not be allowed to converse or to read anything that might happen to influence their decision.

In Fayette it became the custom to enforce the seclusion of felony jurors to a rabid and ridiculous extent; we were marched to the boarding house like a chain gang for our meals and if we passed a friend on the street we must look the other way and could not speak smile or wave to anybody. At meals we must not say a word but point to the bread if we wanted another slice; after supper we were taken up to the ^{courthouse} attic hot in summer cold in winter, where we could do nothing but sit on our cot until ready to get into it; we could read nothing, could not talk to each other, could not telephone home; if one man needed go to the basement during the night we were all awakened to go along as we must never be separated.

In the morning we all washed our face in the same tin basin that had been in use for years; if at 4.30 P.M. one of us wished to repair to the basement we had to stand up before the whole court to announce our desires, have court recessed and take the other eleven and the deputy sheriff along. While we were being marched around with downcast eyes like criminals, the real culprit, out on bond stood on the street corner free to go where he pleased and to talk to everybody.

The pay being only enough to meet our boardbill, everybody became ill or found some reason why he could not serve, all but the farmers living in the remote places who enjoyed hearing the trials and enjoyed the vacation with good legal excuse for shifting the farm chores on to the wife and children for a fine six weeks vacation. These men had good intentions but were too easily swayed by the loud oratory of the attorney for the defendent and there was one unscrupulous lawyer who never lost a case no matter how coldblooded the murder or assault had been. All he had to do was to have the defendent swear that the victim had reached for his hip pocket as though to draw a pistol and that the defendent had believed his life was in danger. With this testimony in the court stenographers notes, the judge was compelled to grant the lawyers demand that one of the instructions to the jury be that if the defendent believed his life to be in danger then he had a right to kill in self defense, and the juries would always swallow that instruction hook line and sinker. A lawyer with a conscience could not advise his client to swear to alie, could not be a party to deliberate perjury and could not make a redhot forceful plea to the jury declaring that his client was innocent when he knew that his client was guilty. It was ^a tragedy that those defendents who retained an honest lawyer got sent to the pen, while those who retained the dishonest lawyer went free and the unscrupulous lawyer made all the big money.

Another of the bad features of the criminal trials was the fact that the dishonest lawyer was a power in politics and he could either make or break the future political aspirations of the prosecuting attorney, therefore some not all, of the prosecuting attorneys played into his hands to gain his favor.

One sheriff contracted with a Fayetteville colored man to feed the prisoners for .35¢ a day and then pocketed the remaining .15¢ which gave a nice side income of \$12 a day, then later the contract was made at a price of .25¢ a day for the feeding of each prisoner. If a prisoner complained to any official or to almost any citizen he would be told that if he preferred his home cooking he could get it by committing no crime.

Then the next sheriff took one more little step along this fruitful path by offering a cash reward to the Justice of the Peace who sent up the most prisoners each month; this quickly increased the jail population to 120 and they had to sleep on cots in the corridors, but those extra 40 inmates gave the sheriff an additional income of \$300 a month.

This bonus system soon had to be called off, not because of the objections of any citizens but because the Justices did the complaining; the through freight trains stopped at Thurmond where that Justice could raid the freights for hoboes and send them up for 30 days after finding them guilty of vagrancy. The other Justices complained of the unfairness of the bonus system since the Thurmond Justice always won the cash prize money giving the others no chance. Going back to the trickery of the P.A. there were certain indictments hinged upon the fact that the guilty man had committed his offense deliberately or maliciously or illegally. When the grand jury found a man guilty and ordered an indictment the P.A. would write up the indictments and hand the bunch to the foreman to hurriedly sign each one before he could go home. If either the P.A. himself or the dishonest lawyer had special desire to get rid of that indictment with no trial, the P.A. would leave out that vital word of "maliciously" or "wilfully" in writing up the indictment. On the day of the trial the defense lawyer would show the indictment to the judge and claim it was no good and the judge would have to agree that it was void; the P.A. would jump up in a fury and ask to see that indictment, gnash his teeth at the oversight, blame it on his stenographer and appear very angry. The indictment would then be quashed and the prisoner freed.

If that lawyer asked the P.A. to dismiss the indictment against John Jones, the P.A. would postpone putting that case on the trial docket, telling the aggrieved parties that there were other older cases having precedence. Two years later the P.A. would appear before the judge some day to state that there were a half dozen cases on the docket that he wished to dismiss because they had become too old and the witnesses dead or moved away or the facts now forgotten and could no longer be relied upon.

In other cases the P.A. would wave his arms and shout loudly enough to satisfy the aggrieved parties, about some insignificant item of the defense testimony and say no word about the vital weak link in it which the defense lawyer was going to use to get a verdict of not guilty.

I am glad to be able to state that during my term as Clerk, the connivances between the dishonest lawyer and the P.A. were the only corruptions that I personally witnessed. The sheriff was something apart, built up entirely by long compounded custom and not to be classed as any corruption; the sheriffs were perfectly good men each one doing no more than to take just one little step farther ~~than~~ along the same path followed by his predecessor.

Each sheriff asked for another deputy until there was not a thing left for the sheriff himself to do and the county became conditioned to it to such extent that I myself would have been shocked if a sheriff had stooped so low as to make an arrest, handle any prisoner or serve any paper.

Two years before my term as Clerk expired a man living on the edge of the county got elected sheriff and he continued to live and conduct his personal business in his home town exactly as before; during the next two years I was in his office daily and never saw him in his office in the courtroom nor in town but once, yet nobody complained of his total absence from any duty. The State gave the sheriff .50¢ a day for the feeding of each prisoner in the jail with the average number being about 80, but the law did not say that the entire .50¢ must be spent on food for prisoners.

If I point my finger at the sheriffs for following a bad established custom they should be allowed to point their finger at the coal operators for following one, their old bad customs about the hiring of the company doctors. For fifty years it was the custom throughout the coal/^{mining} industry to dock each married employee \$1 a month with .50¢ a month from the single men to pay the doctor, but the operator did the hiring and firing.

The inevitable result of this rule was that the operator got the most and the best pills and got them free, since he had no pay envelope to dip into, and if he offered the doctor a dollar the doctor would have to say it was a pleasure to serve him free. Under this system the doctor received a far greater salary than anybody else, often more than the operators annual net profit and to offset this, the doctor was required to furnish all medicines and medical accoutrements without charge to any patient. With bread being so much cheaper than bismuth, this was a very bad rule.

Our doctor with very little education medical or otherwise was supposed to serve as physician, surgeon, veterinarian and exodontist, but luckily everybody was living such a healthy life and eating simple food with little of todays truck, that nature needed scarcely any assistance in its wonderful curative powers. Everything worked out in favor of the doctor to give him a good reputation; each time that nature cured a sick person, the doctor got credit for the cure and every time a person died it was Gods will and nobody not even the best doctor in the world could do anything to change Gods will. After 15 or 20 ~~years~~ years of experimenting on his patients our doctor did become fairly proficient even though his knowledge was by then 20 years behind the times. In his office he had a large boxful of teeth as proof of his vast experience in that line and his evident success in pulling them; his only anesthetic was chloroform and having lost a patient by using it he thereafter rarely tried it again. Having a tooth pulled was agony; you sat on the campstool watching the doctor kick the box of teeth over beside the chair handy to receive the next addition, reached up on the shelf for the forceps and told you to open your mouth; he could not comfort you by saying it would

In the corner he had a skeleton partially hidden by a thin strip of old curtain and if there was any breeze it would blow the curtain aside to show you what you might look like a month or two hence if this operation were not successful. The flow into the box got slowed down in 1900 by the annual appearances of Dr Beall a dentist with his footpumping drill wheel; his equipment was crude but he did careful conscientious work. He pounded gold into three of my lower front teeth in 1903 and I still have them they had to be refilled every 20 years but they are still serving their full purpose and should see me on through to the end.

Dr Beall married Dorothy Holland who had been raised as Eliza Holland. It was about 1898 that Ernest Taylor brought back word from Swarthmore that everybody had a right to determine and to notify their acquaintances what variation of their given names they wished to be used and that he wished to no longer be called Ernest but to call him Jackson or preferably Jerry. After sleeping over this information my mother and my aunt ^{saw} ~~saw~~ their chance to dispose of their names which they did not like and we children were instructed to never again use Kate and Mertie and that my mother would thereafter be Katherine and Mertie would be Martha.

When Eliza Holland heard about this she joined in by changing her name entirely from Eliza to Dorothy; we children observed the instructions but the old folks found it impossible to use any other names but the ones they had been raised to use and had always known. In the parental circle my mother remained Kate, aunt Martha was ~~Mert~~ to father and Mertie to mother and father was Will to the family but Laurie to mother; to the oldtimers back on the turnpike my father was Billy.

The other Holland girl Violet married Mr Hutcheson/^{who} was our C&O station agent until 1900 when his seniority gave him a promotion to Huntington, then we got ^{Bill} ~~Joe Bass~~ so full of ambition that his little station office was the busiest of near equal size beehive/on the whole C&O or perhaps in the whole state. Making another doll became such an obsession with him that he grabbed at every penny straw.

It was he who telephoned to stores up the Keeneys Creek hollow and elsewhere to get orders whenever he heard that a melon car was coming with the local freight that day; he made a profit of .04¢ on every watermelon he could sell. Everybody at Nuttall had baked their bread until ^{Bill} Joe ordered a basket which he sold slowly for a profit of maybe .75¢ a week; he then took out a laundry agency and made perhaps \$1.25 a week on that. He bought butter eggs chickens chestnuts and hides from the back country stacked them up in the station overnight and shipped them somewhere at some profit.

When the C&O paid its sectiongang workers direct from the monthly paycar, all those workers were allowed to quit working long enough beforehand to walk to their nearest station to then loaf until the usually late paycar arrived, then walk back to work. To eliminate all this loss of working hours by a thousand section workers, the C&O ordered the sectionbosses to give their station agents a statement of the names of the workers in their gang and the amount due them each month; then the paycar ~~simply~~ put those sums in envelopes for the workers to pick up after their days work. This was too much for ^{Bill's} Joe's chase of the dollar and he added and collected pay for a fictitious worker and after nearly a year of success he got a tip that the C&O had heard about it, so next day ^{Bill} Joe stepped on the early morning local train and left.

Several years later a trainman riding on the Norfolk & Western on his vacation trip spied ^{Bill} Joe as station agent at a little town on that line but the C&O was too kindly to go after him. ^{over}

Two months after I opened the Bank of Quinwood, I was greatly surprised when Joe walked into my bank for ^a visit, bringing some presents of a bucket of honey and some fine ripe Milam apples. He said he was bookkeeper for the Bank of Lewisburg and hastened over to see me as soon as he heard I was there. His visit and presents were notice to me to tell nothing and I didn't; at first I felt it my duty to inform the Bank of Lewisburg but after sleeping it I decided Joe had had his lesson and probably was safer than a man who had never suffered the pangs of remorse and regret. Joe was a likeable man always smiling and he gave the bank good service with no defaulting; it is my uninformed guess that he worked in that bank 20 years until he died.

Joe probably ended up as a real good citizen bearing a good name when he died in Lewisburg and I do not want to injure his memory, and I should not have said anything about him. Since I have said it I will allow you to read it but after that I wish you would scratch it clear out before there could be any danger of its being preserved as it is or by chance shown to anybody from Lewisburg.

JOHN NUTTALL
4314 ALTAMIRANO WAY
SAN DIEGO 3, CALIFORNIA

March 4th 1959

My Dear Martha;

You are surprised at my memory and I am equally surprised that you care to listen to them, but since you evidently do enjoy it, I will give you a few more as you requested.

In my book I told only facts and in the case of hearsay I quoted only those hearsays that I believed to be true; when writing the pages recently sent to you I considered it as only a parlor conversation and when it came to my mind about Herberts story of John sending 3 pickled pigs feet, I wrote it in the same vein as though we were just talking to each other.

Since you say you intend to have those pages copied to be permanent I would like to omit that anecdote because I do not believe it really true; I suspect that Herbert concocted that. Whenever a man in a small community made a lot of money and continued to wear working clothes, somebody would dig out the old joke about a drummer asking him to carry his bags to the principal place of business, tip a dime then ask for the big man; this was of course told to my grandfather and I heard it about other men elsewhere, and I fear that the pigs feet story is in that same category/^{even} although I never heard it elsewhere.

In the recent pages I also became too flippant in a couple of places and would like to change that; therefore I wish you would return those pages for me to retouch them as well as to add several more things before you copy it.

As to your father holding the evening services, I do certainly remember him laying the novel on the table, picking up the Bible then offering the prayer; on its face that might indicate that he was the customary leader but it could just as easily mean that the regular leader had a bad cold or sore throat and that John took over for only a few days, and that the reason I well remember it was because it was something out of the ordinary. At any rate that is all in the private preserves of Grace, to say who was regular leader

JOHN NUTTALL
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Your father was always ready to help out on anything and he took charge of the Nuttallburg church and Sunday school whenever my father was away or whenever requested; I remember having often seen him on the leaders platform

It would seem surprising that I remember Fred's room so clearly, but it did not result from one look at it; I visited him regularly and slept there many nights. A new saddle or a new bridle was a source of considerable pride to anybody in 1893 and since Fred had both, that made an impression on me; the game animal skins also made a deep impression because I expect that was the first time I had seen any or had touched any such fur.

When I was 5 my father started to work on the flora of W.Va, published a pamphlet in 1893 and the book/in 1896, a tremendous job listing and describing 2584 flora and it all had to be done in every spare hour he could get. During those nearly six years he had no time for me at all and Fred stepped in to supply that missing link in my young life; Fred took me to Charleston with him whenever he went on business or to attend Masonic meetings, leaving me at the Ruffner while he attended to his affairs. I would sit on the front porch railing or on the riverbank watching the teams getting on or off the ferryboat and their straining to pull the loaded wagons up the bank in front of the Ruffner. Although I was only 5 I have very clear recollections of the ferryboat and its wharves; the pilot must have been a fellow Shriner, as we often rode in the pilothouse and one time Fred left me with the pilot for a few hours of royal entertainment while Fred was attending to business in to

Inasmuch as the coal mines of the Kanawha already had pier facilities and boats were cheaper than the railroad, those mines continued shipping coal out to and up and down the Ohio by steamboats and barges long after the completion of the C&O. Consequently the river had the additional interest of those steamboats with their tows; they got their bridge to put an end to the ferryboat when I was six, but the steamboats lasted until maybe 1900.

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Since the railroad did not go near the river, there was a daily steamboat service between Charleston and the mouth of the Kanawha to serve those who lived near the river; the valley was flat below Charleston, therefore nobody could live close to the river because of the spring high waters and the banks were like a jungle thickly grown with bushes trees and vines.

When coming from law school to Nuttall for vacation I once took the train to Pittsburg, a steamboat down the Ohio then transferred to the Charleston boat which had no schedule except the hour of departure from each end of its run. That boat was the home, the business and the vacation of its owner, who did as he pleased en route stopping at will to replenish his larder with game or fish or to talk with a friend on the bank. When the pilot saw some ducks ahead, he pulled the cord and I heard the bell clang in the engineroom ordering the engine stopped; the captain owner who was stretched out on a chair on deck got his shotgun while the boat slipped along noiselessly on its momentum until it got within range then the captain shot maybe four of the ducks before they could get into real flight, and the skiff lowered to retrieve them. Shortly after that, the bell rang again for no apparent reason and the pilot headed the boat towards the shore and by the time it had lost its momentum it was abreast of a small opening in the bushes where sat ten jugs with tags attached consigning them to a Charleston store or dealer and no person in sight. There was considerable jug trade which had every appearance of moonshine liquor in those lonesome places but it was not moonshine; the jug trade was honey, molasses, cider hard soft or vinegar, maple syrup or apple butter. Around the next bend the boat drifted shoreward again and the captain left by the gangplank with his wife carrying a large basket and the crew fished while the captain went to a nearby farm to buy vegetables for his own use. It was leisurely homey unique journey up the Kanawha.

JOHN NUTTALL
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Whatever possessed my mother to risk and endure the hardships I cannot guess but when I was maybe 8 or 9 we three went to Sutton by train, hired a boat with an oarsman for ourselves and another for the baggage and equipment, then floated or rowed the 130 twisting river miles down the Elk river to Charlest and that was a wonderful journey for a small boy. We caught a lot of fish and surprised a lot of small game as we floated along or rounded a bend. To go back to Fred,- before he got his house built he rode up to his mine every other day and usually took me along, sometimes behind him, more often I rode my pony; I took personal interest in watching the progress of his own new house and its furnishings; we talked about it and about getting that bulldog and I felt as though it was all as much my own affair as if it had been the doings of my own father. When it came time for me to learn the multiplication table my mother speeded the job by offering .02¢ for learning the 2 table and so on up and instead of buying her a present I bought a pipe for Fred with the final payment for learning the whole table. Therefore I had an interest in his pipes and tobaccos and remember them; he bought 6 or ^r pairs of different pigeons, one pair being the rare fantails, and he took pride in his bank mules requiring the stableboss to keep them well carried and well fed, so that they were sleek, plump and sassy. Every man including myself knew the name, disposition and capability of each mule. If several of us were sitting resting on a summer evening in sight of the barnyard, one man would call attention to Bess biting Maud on the neck then running away; another man would remark that she better not try that on Charley or he would whirl around and kick the stuffing out of her flanks before she could get off of range. All the mules were tired except Bess and the driver explained that they had been laying new track on her entry and he had helped with it so th Bess had stood idle four hours. Those mules were an integral part of the village life, socially as well as economically; they lived in the center of the village where we saw them, spoke to them and talked about them almost daily

JOHN NUTTALL
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I have forgotten what I said to you about Palm Springs and will have to repeat it to make it all clear. The owners and guests of the Court where we stay thought it remarkable that a man of 73 could climb to the top of the mountain without a stop and get back in less than three hours; one of them called the editor of the paper, while I was up there, and told him about it and he too thought it newsworthy and said he would like to take my picture and interview me. When I stand on top of a boulder on the skyline they cannot see me because of the distance, so I have to take a half of an old sheet and wave it to prove that I am there, and it looks like a handkerchief.

We were over again last Thursday and they told the editor that I was there so he took my picture, but I did not know there was to be an interview and when he told me to sit down and took out his notebook I became tongue-tied and could not think of a single thing of interest to tell him.

Did I see any wildlife up there? no; did I meet up with rattlers? no, I saw only two in all of my trips; did I ever have a close call at becoming stranded for the night way up there by spraining an ankle or falling? no; did I ever meet up with anybody else? no; did I have any statement to make? no.

With me being unable to hold up my end and being such a complete flop, the write-up had to be drawn from his own imagination, therefore please do not attribute any of the statements to me. He asked me what used to be my principal business or occupation and I said coal mining and the result of that simple statement, he had to use his imagination and he says I am still spry because of long years of working in the mines; I said no such thing.

As soon as we can find two free days, we will go over again and get the extra copies and send you one; they sent me only one copy, holding 6 more for me.

Our love to you all,

John

The Palm Springs affair is an awful fizzle but I suppose you will want to see it anyhow; ~~anyway, I would want to see it, if it were about you.~~
I would want to see it, if it were about you.

JOHN NUTTALL
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In the preface of my book I asked all readers to please remember that I was talking only to my descendents in privacy, but I knew that nobody would or could do that, therefore I asked Grace to not pass it around. You and Grace were sincere in telling me that you enjoyed it and I weakened to the pleas of Grace to pass it around but that was my error and I should have known better. When my story was put in print and handed to anybody they found it impossible to consider it as anything but a full public broadcast and my details of what I myself did could be seen as nothing but public boasting. You and Grace genuinely enjoyed reading it because it tied in with your mental pictures; the other four women who read it were polite about it, but no one of the six men or more, who read it have said a word and I can see very clearly why it was best to keep quiet and not express their/^{true}opinion. What I wrote is quite proper for my immediate family but no further than that and I am going to confine it to that, and later recall the three copies now outstanding. Within a week I will continue the start already made, to delete e verything about myself and leave nothing in it that anybody can sneer at; of course there will still be a flumber of things about myself but none that other people will classify as boastfulness; I will omit some thing and attribute some to other people.

Then I will not be ashamed to give a free copy to whomever/^{has}a claim or tie that entitles them to a copy if they want it. What I am saying is not a show of false modesty; I know the book has a whole lot of interesting facts in it but I have enough common sense to see the point of view of everybody else excepting we three; the book is spoiled for them by so much talk of myself. Therefore I ask everybody else to please stand by until I can get my reforms completely which will likely take until near the end of the year.

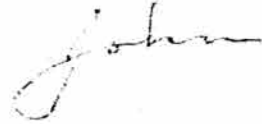
JOHN NUTTALL
4314 ALTAMIRANO WAY
SAN DIEGO 3, CALIFORNIA

My days all well filled with various chores and duties so that I can give sometimes only two or three hours a week to this new job, on such weeks as when we go over to Palm Springs for two days and one night, especially. Last week when over there they were wanting to take my picture for their paper because I appeared to be the only man of my age who could climb to the top of the mountain without stopping and get back down in three hours; I prove my arrival on the skyline by taking along a fourth of an old sheet and display it on top of a boulder, but we did not want to lay over for another day to do this again for the photographer.

There is another man of 73 who goes up but he takes nine hours, resting ever ten minutes and he takes along a lunch, fruit and coffee to sustain him.

Linnie has two free days in succession this week and we want to go over again but at last we are getting the first bad (good to us) weather of this whole winter season and it might prove to be too chilly or windy ^{or} maybe rainy.

With lots of love from both of us to you all,



I have made a carbon copy which I will send to Grace- of this letter.

March 15th 1959

My Dear Grace;

Your last letter was a pleasure and interesting as always and we enjoyed hearing about your Texas trip, also various other remarks; I was pleased to hear that Kirby and Gloria had said they liked my book, -she wrote us a real nice letter but so worded that I was not sure how the book went over. Gloria's letter made it clear that they still were our good friends but left it hazy as to whether it was in spite of the book or if the book helped. I have stewed over the imperfections, flaws and errors of that book until I and everybody else is plenty tired of hearing about it and everybody including myself is ready to call it quits and I have no heart left for doing the whole thing over again. I am going to make a number of explanatory marginal notes with a pen, scratch out a few sentences which do not sound right because of the fact that the printer slipped and missed the previous sentence and rewrite the four worst pages. This rewriting is slow because to rewrite one page I have to also rewrite the page that is on the other side of that printed ~~page~~ leaf and I am having trouble in getting my rewrite to come out even with the two printed pages of the leaf. However I should get this done in ten days, then I suppose it will be a month before the printer runs off the replacements; I will cut the four offending leaves from the book and paste the rewrites to those stubs; nothing of any moment will be omitted, simply clarified with the errors corrected, or the missing sentences put back in.

I wish you would not show the book to anybody else until I can get this job done; they will gain something and lose nothing by waiting six weeks until I call in the three books that are out and make the corrections, then I will give the Himes four copies, Martha four and one to Mary and ^{one} to Bessie. Since I wish to address several remarks to Martha as well as to you I am making a carbon copy of this letter to send to her with the clipping.

As you can readily see, the clipping turned out to be a complete fizzle with me being totally unrecognizable in the picture and the write-up pointless, and don't blame any of that write-up on me, as I had little to do with it and did not get to see it beforehand to make any changes in it. They speak of my years of working in the mines and I never said a word about working in any mine, all I said was that I was born at a coal mine; they speak of me spryly jumping over the end of the chaise lounge which was 10 inches high, 15 inches wide and over which I merely stepped, as you or anybody would have done.

You ask me to make you a carbon copy of my addendum but I am not rewriting it just one or two pages of it, with one or two lines changed on another page; it would do you little good to have a carbon of only the couple of additional pages that I expect to write. When I wrote those pages of addenda I had no thought of permanence or preservation but since Martha spoke of having copies made it has ~~changed the situation;~~ ^{changed the situation;} I had thought that Martha would simply like to read it, then it would go into your bulging files. And now I have another thought, - that if it is going to be copied, my grandchildren really have a first claim on it and the original should be returned to me for them.

As to the pages to be added, I had in mind to tell about how J.N. showed his wife's uncle Morgan how to open a mine on the patents that Morgan had taken out on New River on the west side of Fern Creek; J.N. later gave Morgan the first lease up the Keeneys Creek hollow and still later gave him the last one up at the end of the branch.

In my last letter to Martha my elderly reminiscing drifted around to touch Fred Rothwell's mules and the Kanawha steamboats and I may add that but I have so much trouble in determining what should interest the whole family and not just one member of it, and/or be of interest only to me because I have so many mental pictures of the surroundings, backgrounds and related incidents

Before I start on the addendum I want to finish my job of correcting the book pages and get that to the printer. You are not guilty but almost everybody else thinks of me as sitting idle in a chair all day with nothing to do, but I just don't have any spare hour any day and can find so few hours for working on the corrections or anything else. Housework yardwork, trips to town to the bank, trust company, barber, laundry, and stores, bills to pay, letters to answer consume all mornings; getting on my walking clothes, driving to my starting point, walking 5 hours, then washing out my damp clothes and myself ends at supper time and I spend all evenings with Linnie listening to the TV or playing cards with friends; Linnie rightly says it is no fun for her to watch TV all alone, with me upstairs writing. Then too, our trips keep me always behind on the above activities; last week Linnie had no engagements Wed or Thursday so we went over to Palm Springs and today it appears that she will be free this coming Tuesday and Wed and if so we will go over again. We enjoy that drive, also the friendly people of the Apartment Court both the owners and the guests and I get such great joy from walking along the crest of that mountain where it is all untouched and undefiled by man and still the same as it was a million years ago, quiet, peaceful and a wondrous view, no tin cans papers or billboards, nothing but scurrying lizards and busy birds and the fresh odors of the wilds and of the juniper trees.

Here in town Dr Lush the dentist has worked on my parents, Jack, me and the children and he is much interested in Lee's engagement, saying he hopes to at least pull a tooth from the fifth generation before he quits. He is the only person in town to whom I have loaned my book and it happened to hit him just right for several reasons that I had not previously known. He was raised in Cincinnati and often travelled through our country on the C&O, has also been driving through there and not long ago spent a night at Cauley Bridge. His wife was raised at Bluefield, W.Va and she was especially interested in

my train talk because her father was a railroad engineer on the run north from Bluefield; Dr Lish also went to school with Dick Haine of Rainelle. Lee is still fully engaged and we get good reports about the boy Warren; the separation during her European tour might have some effect but I doubt it. We are indifferent; we find no fault with this boy; if they break up she may get a better one and she may get a worse one, so we are fully satisfied to let well enough alone and cheerfully accept Warren or cheerfully take a look at another one if she thinks she has found a better one.

On the 25th we leave for New Orleans to get back home April 2nd which is Lee's 21st birthday; she is having a big party, to which Warren's parents and we are invited to attend but we will certainly be fish out of water. If my prayers are answered, our train will be six hours late in arriving in San Diego.

This is a nice warm sunny day such as Linnale likes to utilize by going to the Zoo for lunch and the one hour bus ride throughout the Zoo; she enjoys the big crowd, the happy children, the ride and the animals and so do I and it is now time for me to clean up and get ready. We have to be in the lunch room by 11.30 to get a table by the window where we can watch the crowd.

With lots of love,

John

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With lots of love,

John

JOHN NUTTALL
4314 ALTAMIRANO WAY
SAN DIEGO 3, CALIFORNIA

March 23rd 1959

My Dear Martha;

An enthusiastic applauding listener like you surely does spur me into a lot of talk; you asked me to write down everything that came to mind and I have done so in doubling what I first sent to you, but I have now pumped myself dry and I am sure that there can be no more.

You asked me to tell about the Ruperts but I want nothing to do with them; Ella published a most bitter and untrue attack upon my father while Bert and Broadus stood by giving tacit consent with no restraining hand nor apologies. Whenever grandfather was asked ^{how} he forged ahead of his compatriots who were receiving the same wages he said the others put all of their possible savings in their mouth while he kept his mouth shut and put his pennies in his pocket. He did not drink anything but water used no tobacco, ate only the simplest foods and ate no truck at all such as peanuts candy bananas, sweet cakes. At the company store he used to fuss at Fred for stocking sardines and canned peaches and would chide the men for buying expensive canned salmon when they could get better fish meat by taking a line down to the river; and they were foolish to buy the expensive canned peaches when other fruits were in season.

Ella heard something about this and attributed it to my father then made up a story about grapefruit picturing father as a detestable cad; it has been a sore temptation to get even with her by telling some things that are true about her father but so far I have held my fire. All I have said about him that he went to Georgia to marry a girl recommended by a drummer; I do not want any of the Ruperts to have the satisfaction of seeing anything at all that I have written, nor do I want anything said to them about any of it.

To show you their viciousness I will enclose a copy of that article published in the Fayette Tribune but please destroy it since I naturally want no such calumny to be seen or preserved; my father did not curl his lips in a sneer at poor people.

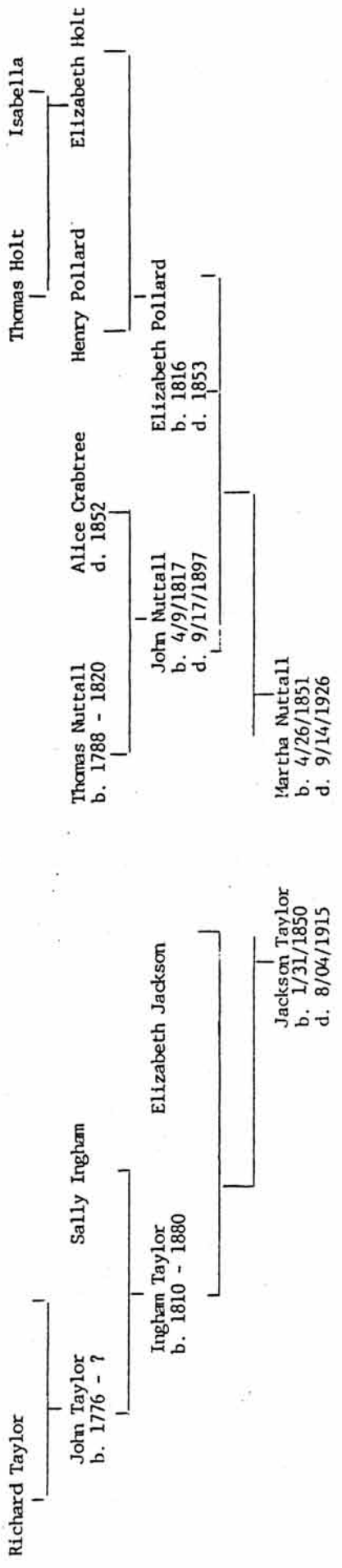
A generally prevalent and most unbecoming characteristic of the prosperous man is his seeming bitterness to the poorer man having the luxuries he prefers to think are created exclusively for him and his kind.

An ugly growl I heard when I was a small child was one made by a prominent and wealthy coal-land owner. His gall at the fact that simple grapefruit was within the reach of the poor was uncontrollable! He said; "the idea of their daring to spend their scant earnings on such extras as grapefruit- allowing themselves to want what they shouldn't be able to afford".

The man who said that was small of stature topheavy of hair and Vandyke beard he looked like a smart wire-haired; he was travelled, schooled and polished. But when I think of that man it is not of his aristocratic bearing, his tales of travel, his shelves of books that lined two rooms, that I think, it is, instead as a child again, that I remember his resentment at the poor enjoying grapefruit. I know persons today who can't keep their lips from curling to sarcasm when they hear that poor old Jones has at last acquired this luxury or that. It would seem then that if everybody can afford saddle horses and riding clothes as can Mr Tweek then having saddle horses and riding clothes is no longer smart and sophisticated for Mr Tweek.



Taylor





**CERTIFIED COPY of an
Pursuant to the Births and**

**ENTRY OF BIRTH
Deaths Registration Act 1953**

Registration District

Haslingden

1850. Birth in the Sub-district of

Rosedale in the

County of Lancashire

| No. | 1 When and where born | 2 Name, if any | 3 Sex | 4 Name, and surname of father | 5 Name, surname and maiden surname of mother | 6 Occupation of father | 7 Signature, description, and residence of informant | 8 When registered |
|------|---|--------------------|----------|----------------------------------|---|---------------------------|--|---|
| 140. | <i>Thirty first January 1850 Holme Field Lower Booths</i> | <i>Jackson Bay</i> | | <i>Ingham Taylor.</i> | <i>Betty Taylor formerly Jackson.</i> | <i>Wooden Carden</i> | <i>Ingham Taylor. Falka Holme Field Lower Booths</i> | <i>Twenty eight February 1850</i> |

Certified to be a true copy of an entry in a register in my custody.

Margaret Jackson

CAUTION:—Any person who (1) falsifies any of the particulars on this certificate, or (2) uses a falsified certificate as true, knowing it to be false, is liable to prosecution.



ENTRY OF BIRTH
Deaths Registration Act 1953

CERTIFIED COPY of an
Pursuant to the Births and

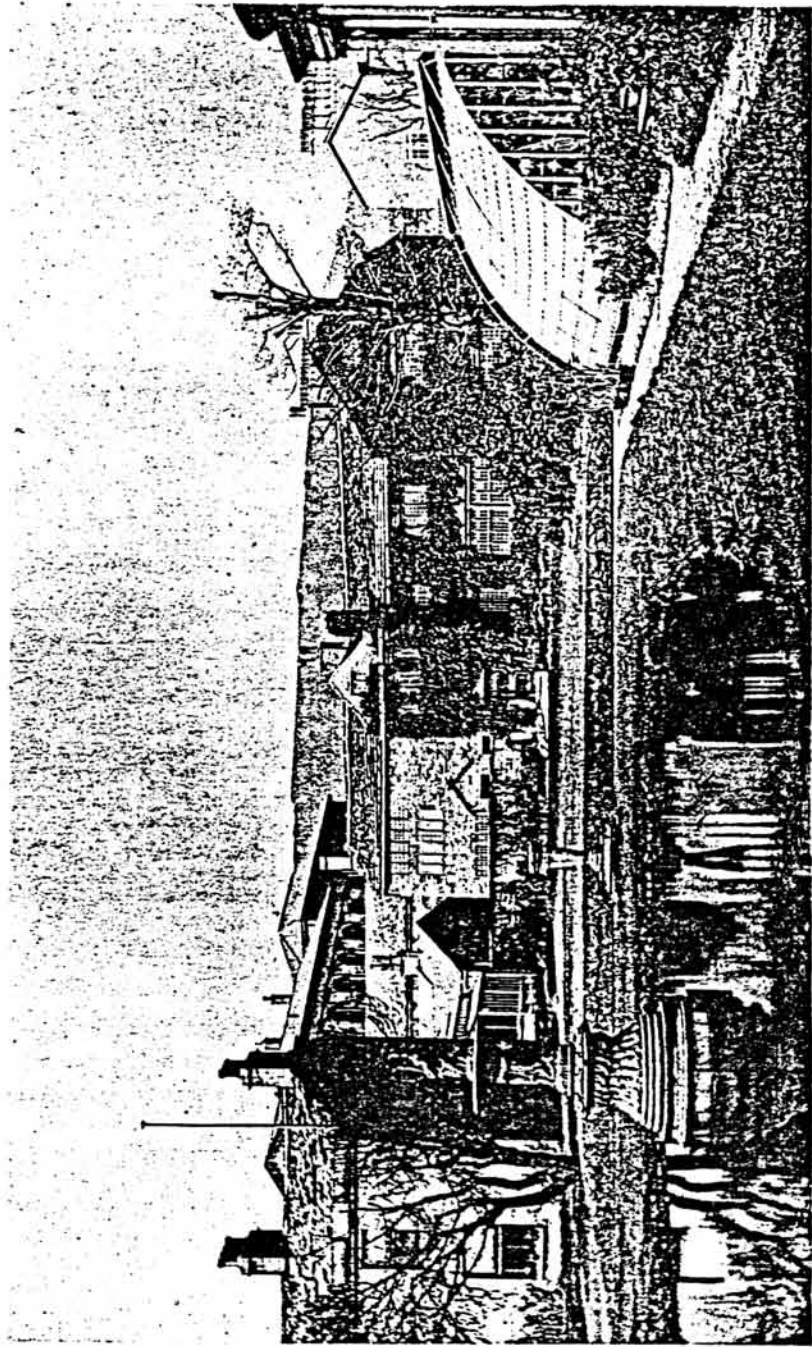
| ration District | | Haslingden | | | | | | | | | |
|-----------------|-----------------------------|--|----------------------|--|----------------------------|---------------------------|---------------------------------|--|--|----------------------|--|
| istrict of | | Rosebale | | | | | | | | County of Lancashire | |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 ^a | | | | |
| Sex | Name, and surname of father | Name, surname and maiden surname of mother | Occupation of father | Signature, description, and residence of informant | When registered | Signature of registrar | Name entered after registration | | | | |
| on Boy | Ingham Taylor. | Betty Taylor formerly Jackson. | Woollen Carder | Ingham Taylor. Falken Helme Field Lower Boobles | Twenty eight February 1880 | James Rawstron Registrar. | | | | | |

*See note overleaf.

to be a true copy of an entry in a register in my custody.

..... Registrar *James Rawstron* Deputy Superintendent Registrar
 Date

of the particulars on this
as true, knowing it to



Henry and Henry, Photo.

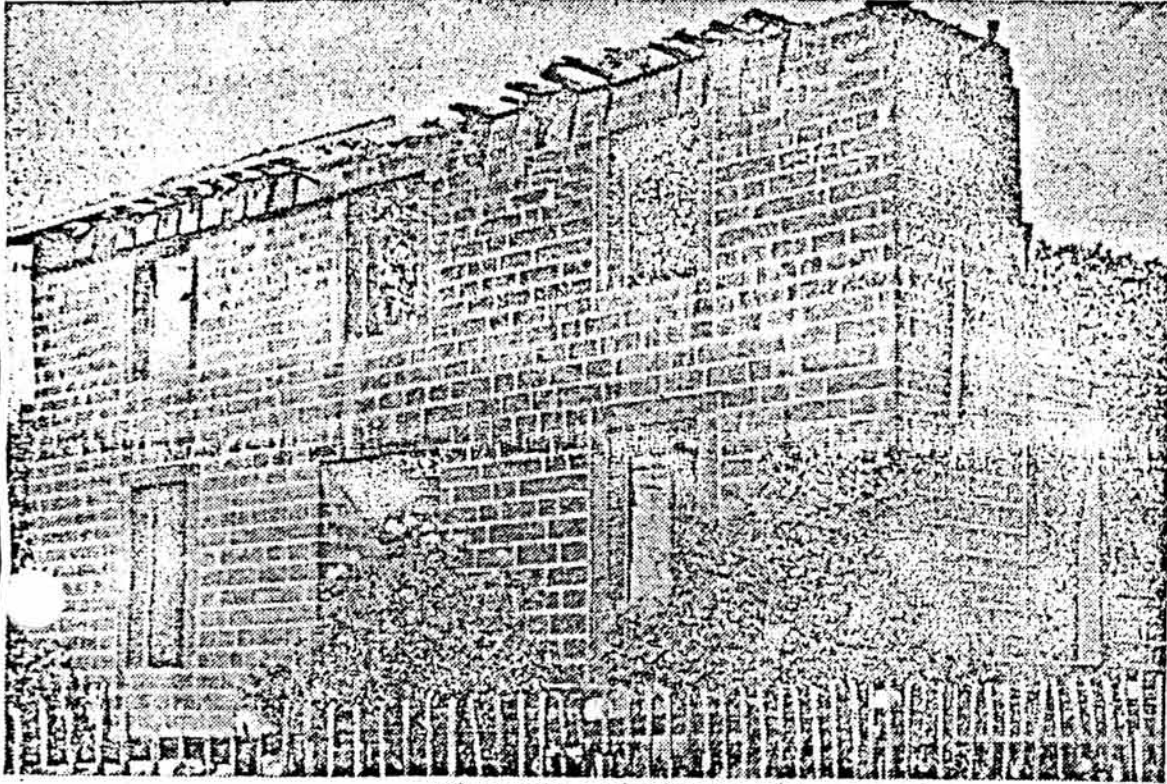
Hastingsden.

THE OLD HALL, NEW HALL HEY, RAWTENSTALL.

The end of Mytholme House

July 7 62 RFP.

7.7.1962



The facade of Mytholme House, Waterfoot, pictured just before it fell.

This somewhat dramatic demolition job was accomplished by means of giant hawsers fixed round the building and attached to a bulldozer which hauled down the house piecemeal.

Work at Waterfoot continued with a deafening roar and dust clouds rolled across the nearby river.

Mytholme House

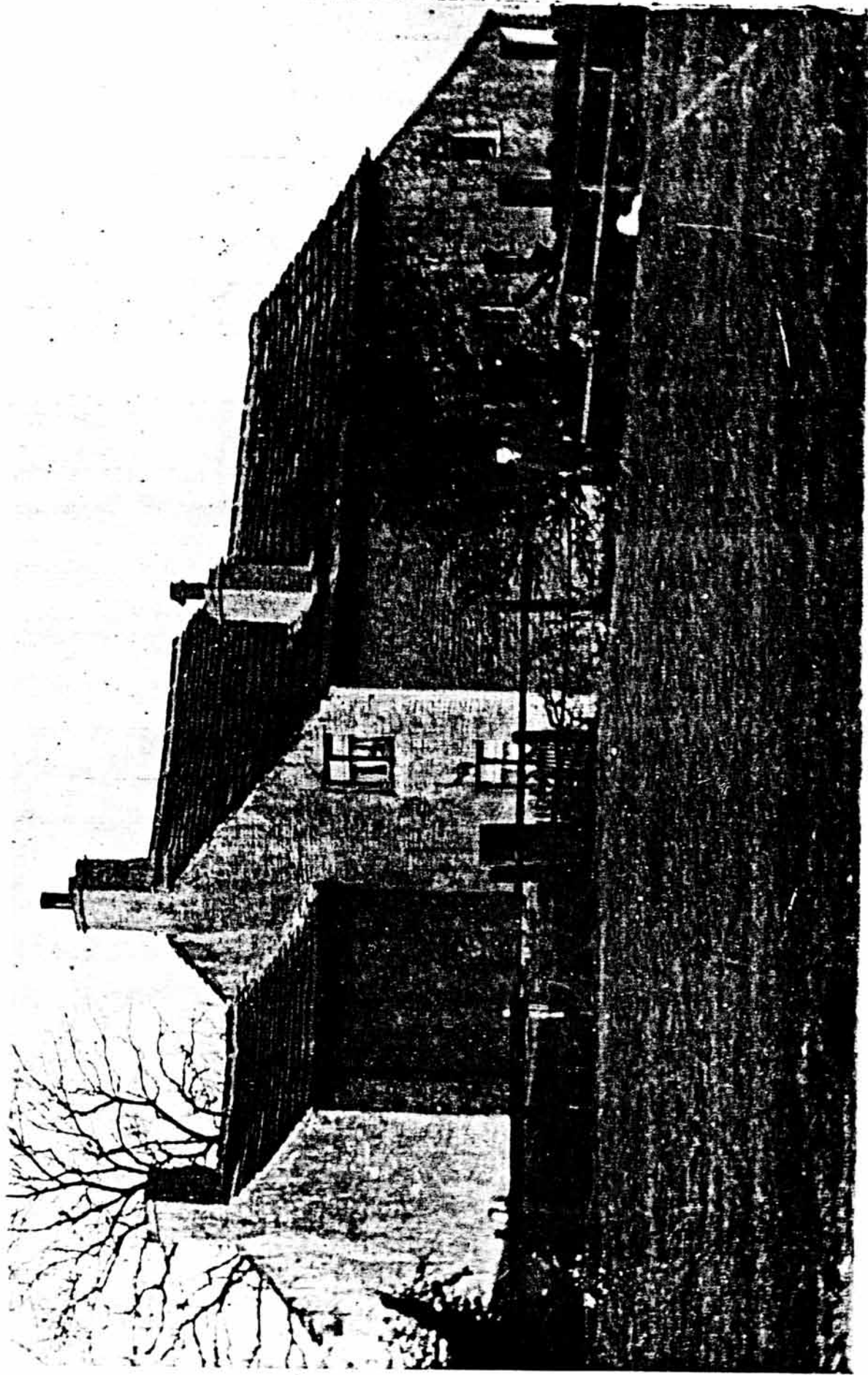
The article in last week's issue on the now-demolished Mytholme House at Waterfoot has elicited the information that the original owner was Mr. William Stansfield, who was the father of Mr. George Stansfield, a member of the local felt combine. Also living there last century was a Mr. James Hill. His daughter Florence, who was born there 80 years ago, now lives near Grange-over-Sands—in a house she has named "Mytholme".

Now the site is levelled and when the existing stables (at present used by a school of riding) are dismantled, it is believed plans are in progress for the building of an old folks' hostel.

Mytholme House is over a hundred years old—it is featured on a map of the locality dated 1849—and was originally owned by Mr. George Stansfield, a member of the local felt manufacturing family. It was bought by Rawtenstall Corporation over 40 years ago, the original price demanded being in the region of £7,000. This was later reduced very considerably—a figure of £1,000 has been quoted unofficially—and could be said to represent one of the Corporation's bargain buys.

The house has had only two tenants during its history, Mr. Horace Hall, who was secretary for Joshua Hoyle and Co., being the first. For the remainder of the time it was occupied by the late Dr. Lewis Anderson and Dr. Joan Anderson.

It has stood empty for a considerable time, and plans for it at one time included its conversion into flats for single persons. The grounds, though not extensive, are very attractive and pleasantly wooded.



HOUSE WHERE ELIZABETH JACKSON, JACKSON TAYLOR'S MOTHER, WAS BORN.
NEAR NEW CHURCH, LANCASHIRE



ST. JAMES TERRACE BACUP RD. WATER FOOT ROSSENDALE
THERE ARE 6 HOUSES IN ST. JAMES TERRACE. JACKSON TAYLOR
STAYED IN ONE OF THEM WHEN HE VISITED IN 1883



"HOLMEFIELD"

1977

BURNLEY RD. RAWTENSTALL ROSSENDALE



Hurst
Crescent
Rawtonstall
Lanc.
May 13

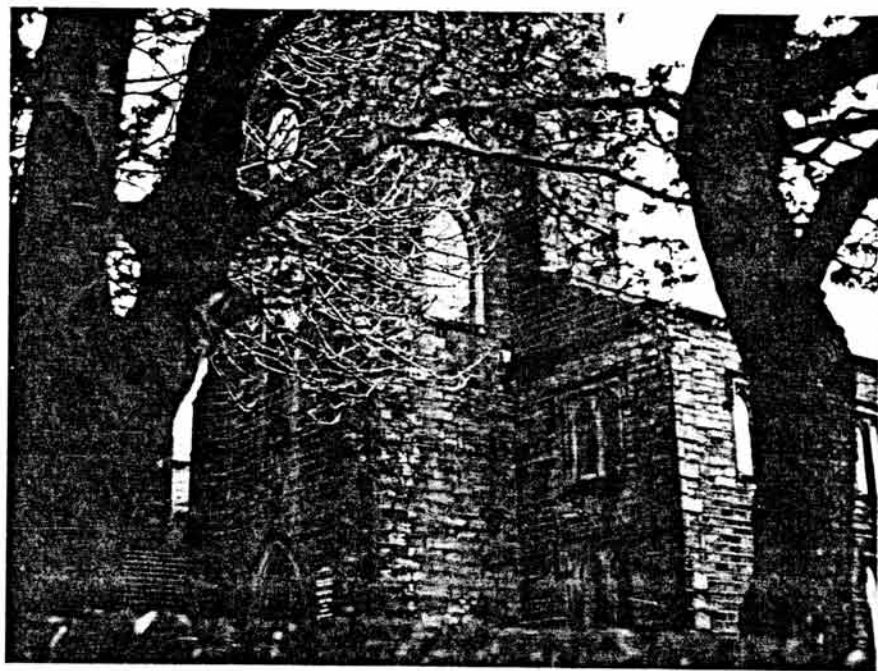
Apts.
made
from
barn
on
Hurst Farm
where
Grandfather
Taylor
lived

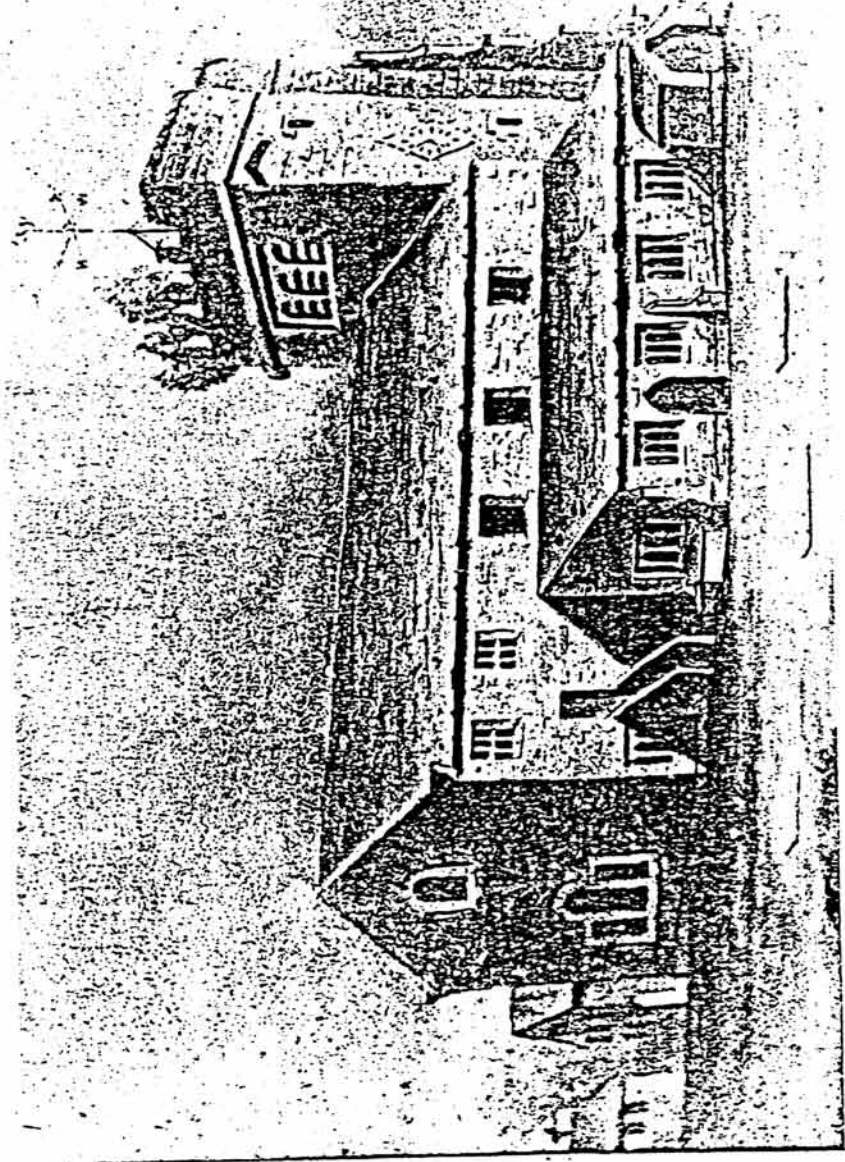


New
Church



New
Church





Henry and Henry, Photo.

Hastingsden.

VIEW (FROM A PAINTING) OF THE CHURCH WHICH FORMERLY STOOD ON
THE SITE NOW OCCUPIED BY ST. NICHOLAS' CHURCH, NEWCHURCH.

TAYLOR

Compiled By Grace Taylor Himes, 1952

There are Taylors everywhere. They seem to be a prolific family, a bit of rabbit in them perhaps. Though, without a doubt, the families are quite unrelated as many must have taken the name because they were tailors by trade.

However, there was a Baron Taillefer who came over to England with William the Conqueror. He died in the Battle of Hastings and his family received large estates in County Kent, England, where the name's spelling was changed in many ways. Taylor, Taylar, Tayloor, Tayllour, Tayliur, Talur, Tailor, Tailer, Taillar, Tailleir, Taellour, etc.

Our family came from a corner of Lancashier, England, called "The Forest of Rossendale", once a great forest for the King's deer, where only he or his friends hunted. Should any other man kill his deer, he was killed, in turn, as a poacher.

Before the reign of Henry VIII, there were only 20 persons living in the forest, an area of about 30-1/2 square miles. Henry VIII opened up the forest for people to live in and in 40 years the population increased to 1,000 persons. The Taylors, Nuttalls, Holts, Holmes were living there in the earliest times and, without a doubt, all the old families have intermarried many, many times. But, in spite of that, the Taylors are very sane and normal mentally.

I have a "History of Rossendale Forest" written by a step-cousin of my father, Edward Newbigging.

In the year 1200, the names Henr. deNovo and Henr. DeTieys appear. They could be Henry Nuttall (as that name was spelled DeNuttough in early times), also Henry Taylor. In the lists of the Graves of the forest from 1559 down to modern times, there are many Nuttalls, Taylors and Holts.

The Graves or Greves or Reeves (Chaucer) were the overseers of the forest appointed by the King and directly under him, collecting the taxes, getting all work done, etc., etc.

I cannot go far back with Taylor or Nuttall records. They did not bring their records along when they came. But my Father used to report his sires back as far as Laurence Taylor, whom he called the old soldier for he was "memorable" for something, and there was a monument to him in the old Newchurch Church Yard. He would say "Jackson, son of Ingham, son of John, son of Richard, son of Laurence, son of the old soldier". A Laurence Taylor was a Greve of the forest in 1532, an Edmond Taylor was a Greve in 1563. A Laurence Taylor married Ann Ashworth in 1714.

I don't know what my Father's people did, but Ingham, John and Richard all lived on the "Hurst or Herse" farm near Rawtenstall. James, a brother of Ingham, was a man of money and property, he has mills of some kind and no doubt Ingham worked for him. James left a very long Will which I have. It was a very long drawn out estate. He died in 1883 and I got the last money from it around 1930, which I put into \$20.00 gold pieces.

My father was the youngest of eight children. His oldest brother, James, came to New Brighton, Staten Island. He had a warehouse there, where he sold the felts made and printed at Hollin Mill, England. Later, Uncle James bought a mill in Newburg, New York, where he manufactured lap robes and blankets and printed them. That mill has since been bought by Strook. When my Father was 15 (1866), he came to work for his brother and all the rest of the brothers and sisters came too. My Mother came to New Brighton often to visit her Mother's half-sister, Aunt Martha Crabtree Sutcliff. My Mother's Father had worked there in New Brighton for his brother-in-law, James Crabtree, in 1849. All these English people knew each other. They all came from Rossendale. Mamma and Pappa fell in love and eloped to Virginia. They were married at the home of a Mrs. Chase, a very dear friend of hers. Then Grandpa Nuttall wanted them to go to West Virginia with him, to open up coal mines there, as he had bought a large tract of land in Fayette County. They went. Grandpa lived with them. He built quite a large house at Nuttallburg, where all nine of us were born. Two died as babies.

Nuttallburg was in a canyon. The swift and dangerous New River was at the bottom of the canyon. The railroad, when it came, ran along the river. It was a wild, primitive place. We had to have a governess to teach us. Our household help came from England. Our home was sort of the hotel for the town, as there was no where else to stay. A traveling Dentist would set up his office in our sitting room and stay till all town peoples' teeth were filled. The traveling piano tuner would come and stay, bringing his violin, and we would have concerts every evening. The traveling salesmen would stay. There was one church and all denominations had services in it. All the ministers would stay with us. I loved the Episcopal minister in his white robes, for Nuttallburg was such a cindery, smokey place, such whiteness was angelic.

But, we had relief from the dirt when we would move on the mountain top, to our farm in the summer. It was like Heaven to us. We called it "Holmfield" after Uncle James' place in England. There we rode horses, played games, had much company, went on picnic after picnic, would sometimes take all the vehicles and horses we had and all the family and friends who happened to be staying with us and go on a few days trip to see our land in Nicholas County or to White Sulphur Springs. We called them "Struggles", for the roads were one rock after another. We had to cross rivers on flat ferry boats and, worst of all, there was no where to eat or sleep. People would just take us in.

We grew up. My oldest brother, John, and my oldest sister, Mimmie, went away to school. Then John married one of our governesses, Neva Mercer, who had gone to school in Norfolk, Virginia, with Mimmie. Martha was born the first

year, and Neva died a year later of diabetes. Martha then lived with us. Minnie married Frederick Rainbow Raven, a young Englishman who worked at Dubree, one of Grandpa's mines which had been leased to Herbert and Fred Rothwell, two other Englishmen whose grandmother had married my Father's Father and whose sister, May, later married John.

My brother, Jerry (Ernest Jackson) was sent to Swarthmore. He graduated from the college at 19. Then my Mother and Father and Uncle Will Nuttall decided to lease all Grandpa's mines and move where we could be educated. Alice, Andrew and I already had been boarding pupils at Swarthmore for two years. Alice married at 19, to Marion Lindsey Dawson, a Virginia man much older than she, the summer before we moved to Swarthmore in 1903. So, only Andrew, Tom, Martha and I lived in Swarthmore; first in a rented house on Maple Lane, then we bought a house on Elm Avenue off Chester Road, next to William Walters. I lived there eight years, then married. The house was sold after my Father died in 1915. Jerry had moved to Colorado on account of ill health and Mamma came east and bought the Hanover House on High Street for Andrew, who had just married Elizabeth Glascoch of Washington, about 1922. She died there.

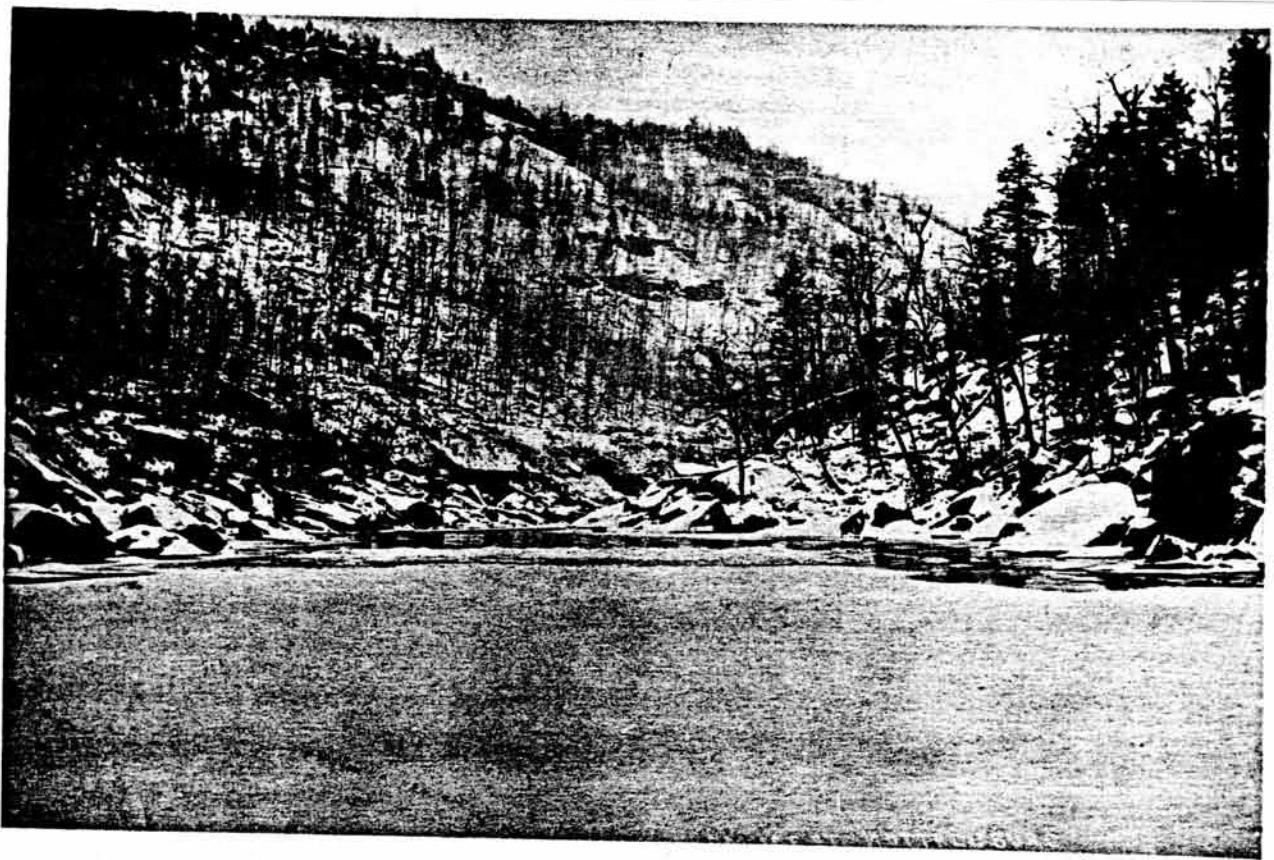
These are the Taylors, as much as I know, from my Great Grandfather down:

John Taylor - Hurst Farm, Rawtenstall
1790 - 1880

- (1) Ingham - Jackson's Father married (1st) Elizabeth Jackson. They had six children: James, John, Sarah, Mary Ann, Jackson, and William.

Second Wife - Mary Downham (widow) with children. One of her daughters married Henry Rothwell, another married a Whip, another a Hill. Edith Whip married Herbert Rothwell. Florence Hill is a cousin. May Rothwell married my brother, John.

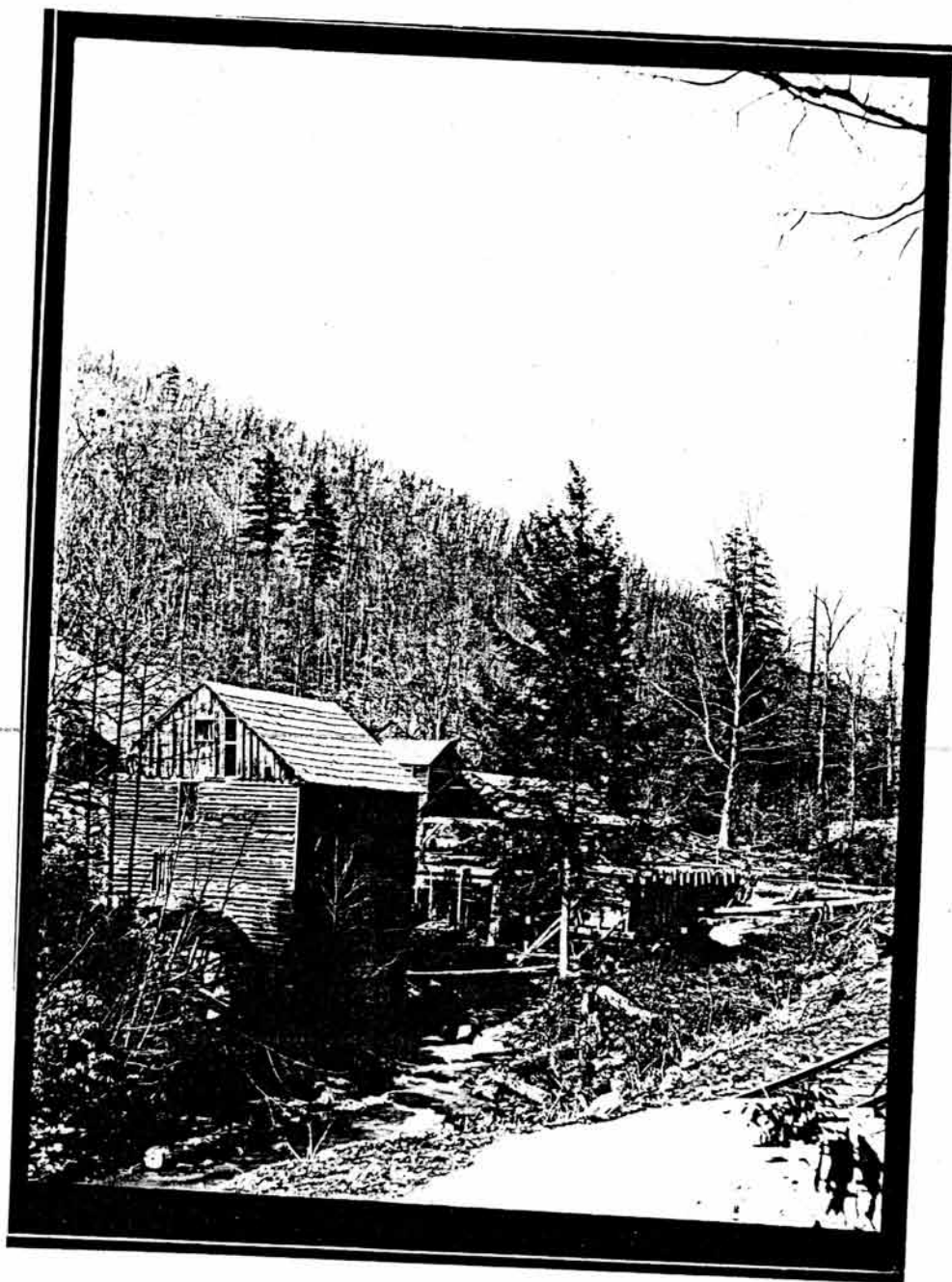
- (2) James - The rich one - - married Sara Ann. Two daughters: One married a Walton, one a Whitworth.
- (3) Helen - Married John Arthur Lomax, a famous artist of London. His father also was a fine artist. I have two black and whites of Fathers and two photos of John, Jrs. They were both masters of art. Helen and John had no children.
- (4) John - Died.



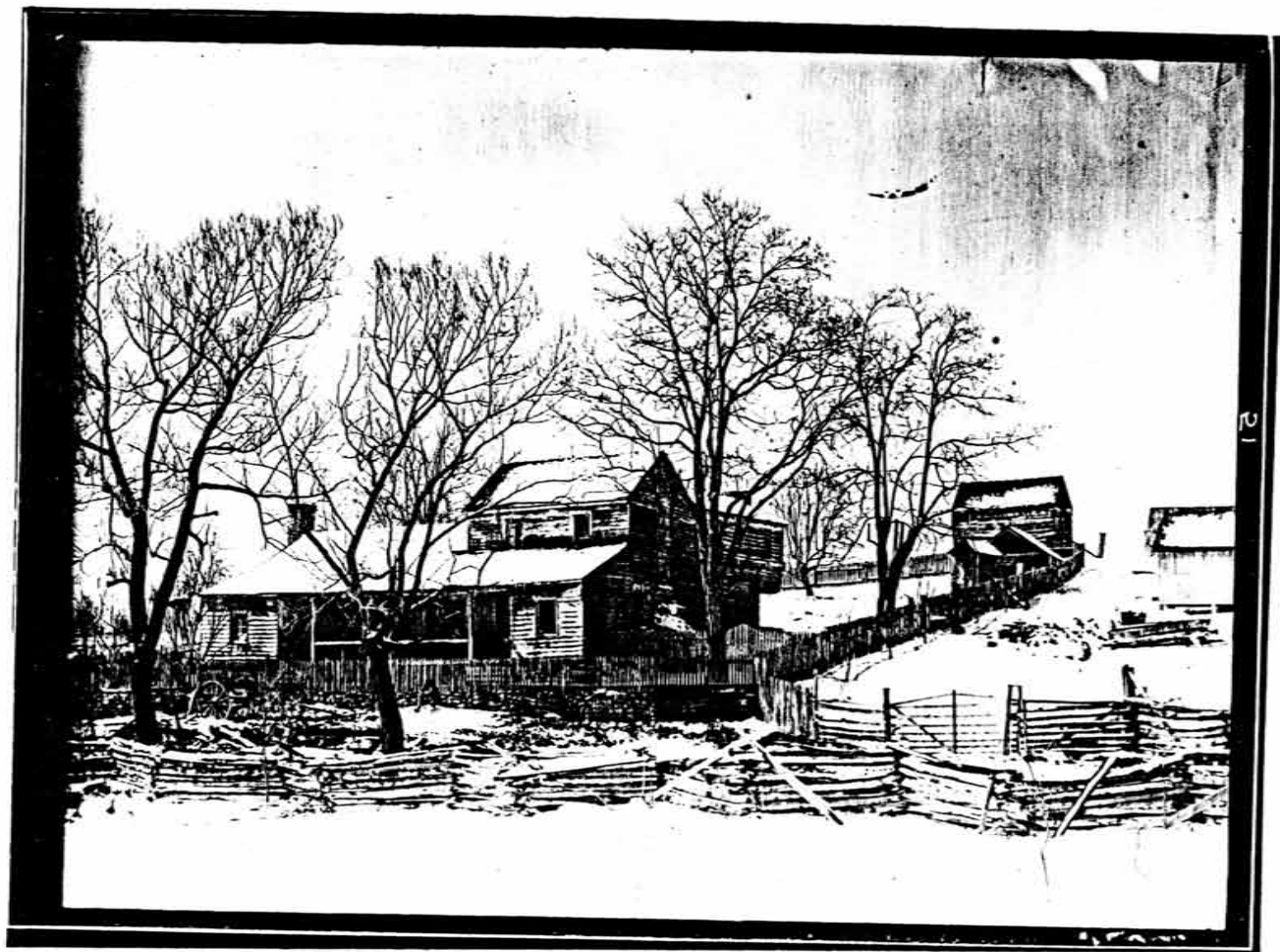
ICE ON NEW RIVER - NUTTALL



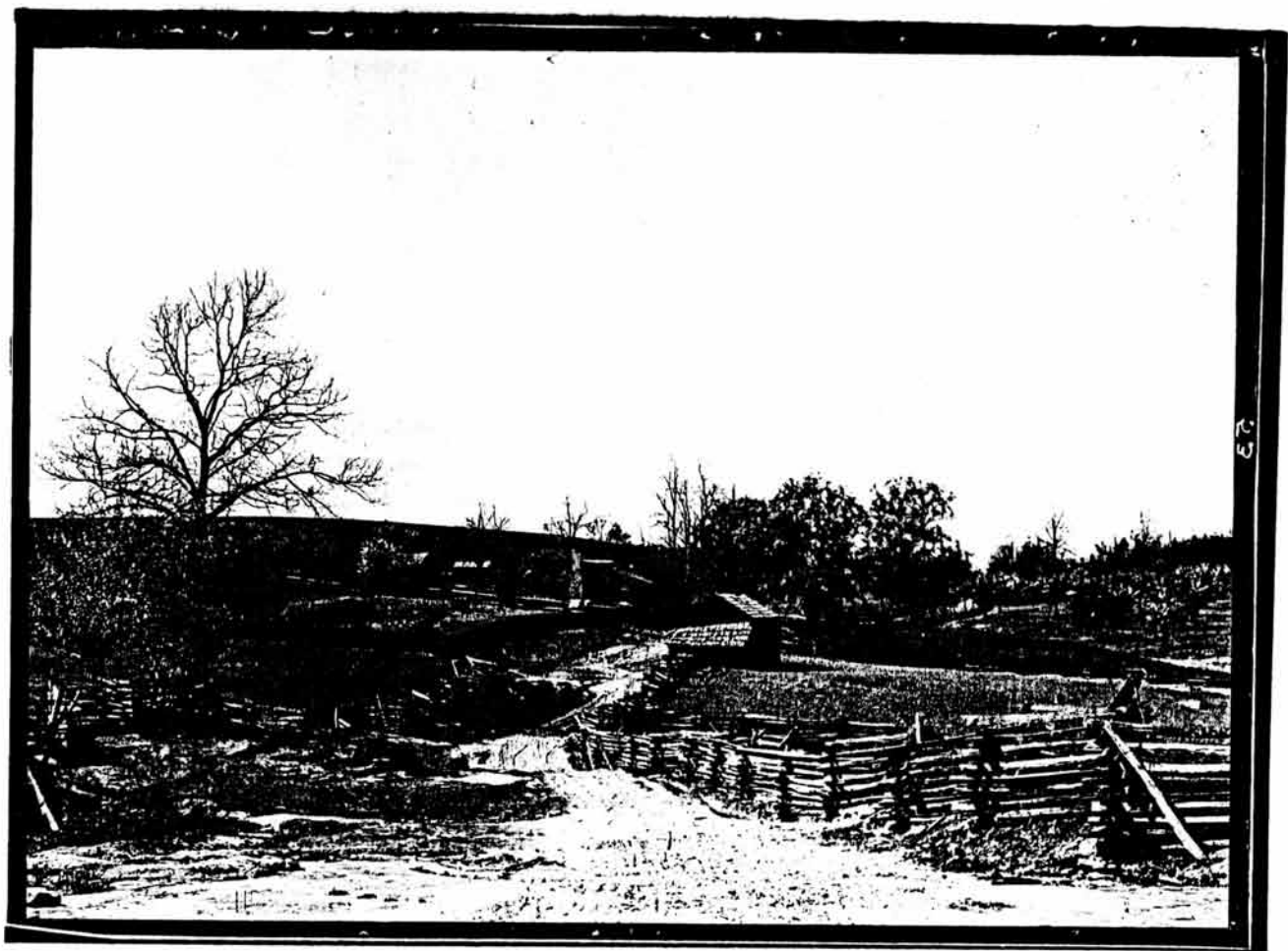
CONSTRUCTION - KEENEY'S CREEK R.R.



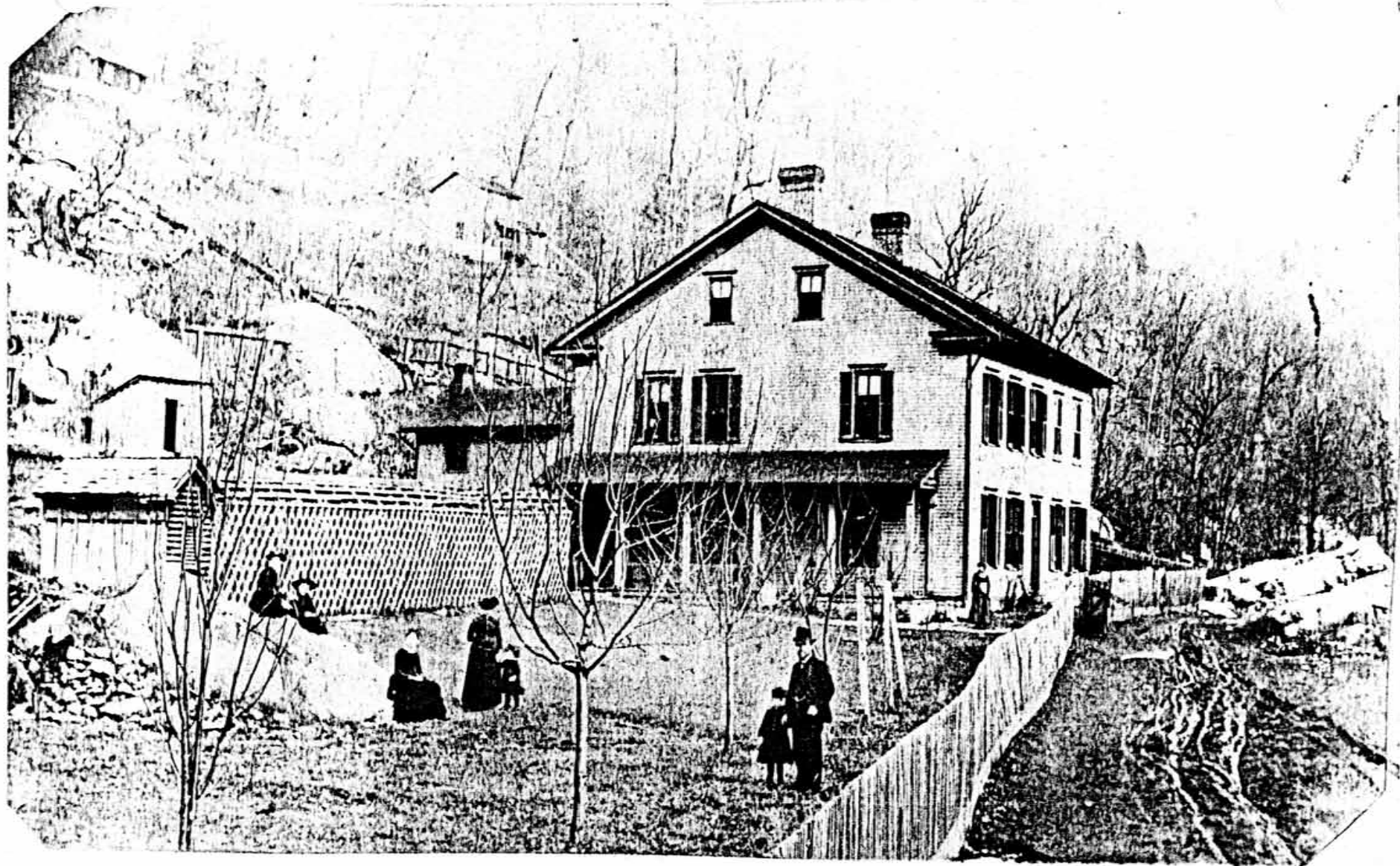
WITHEROWS OLD MILL



OLD ALDERSON HOUSE — WINTER



OLD ANDERSON HOUSE FROM NEAR CODY DOCK

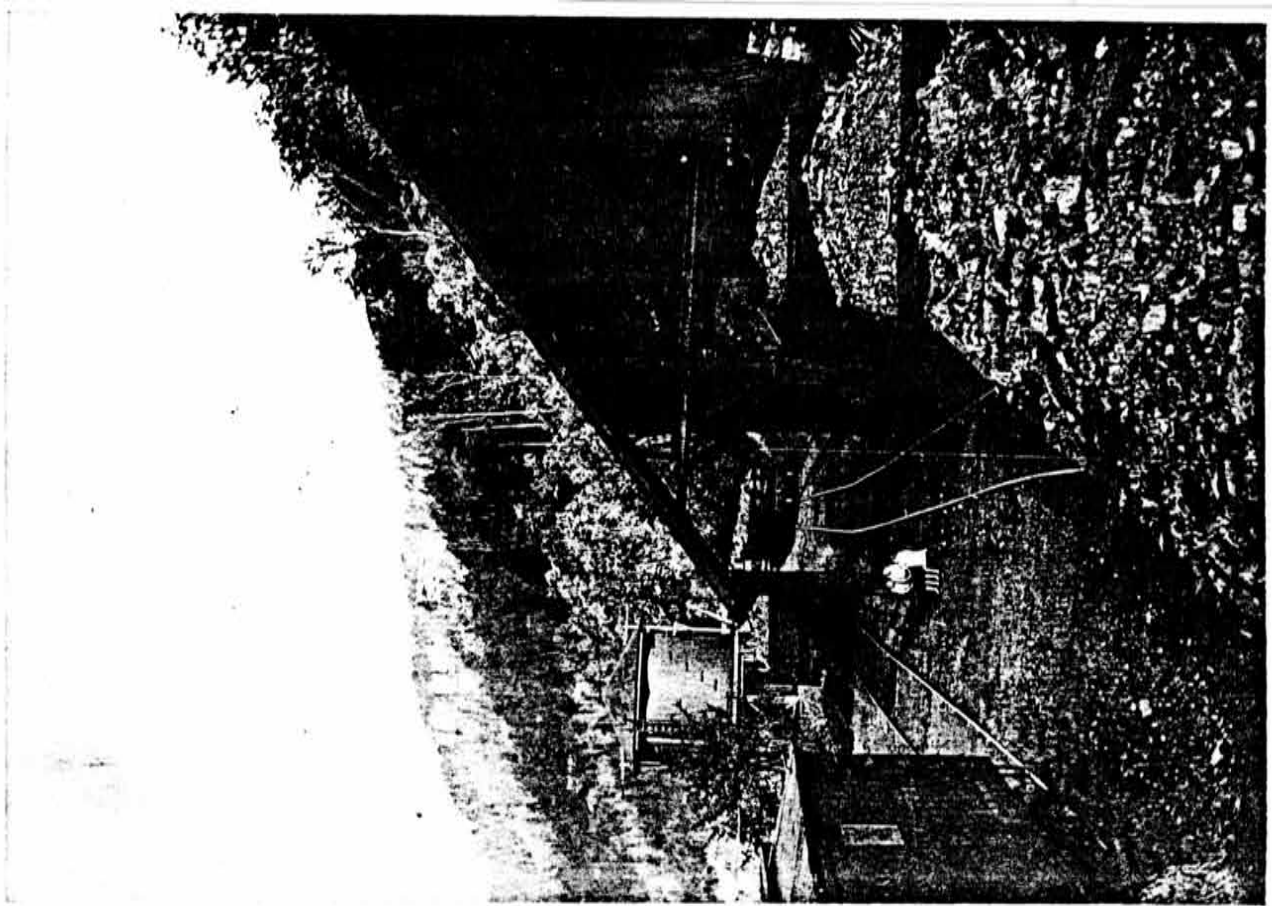


TAYLOR HOUSE
NUTTALDURG

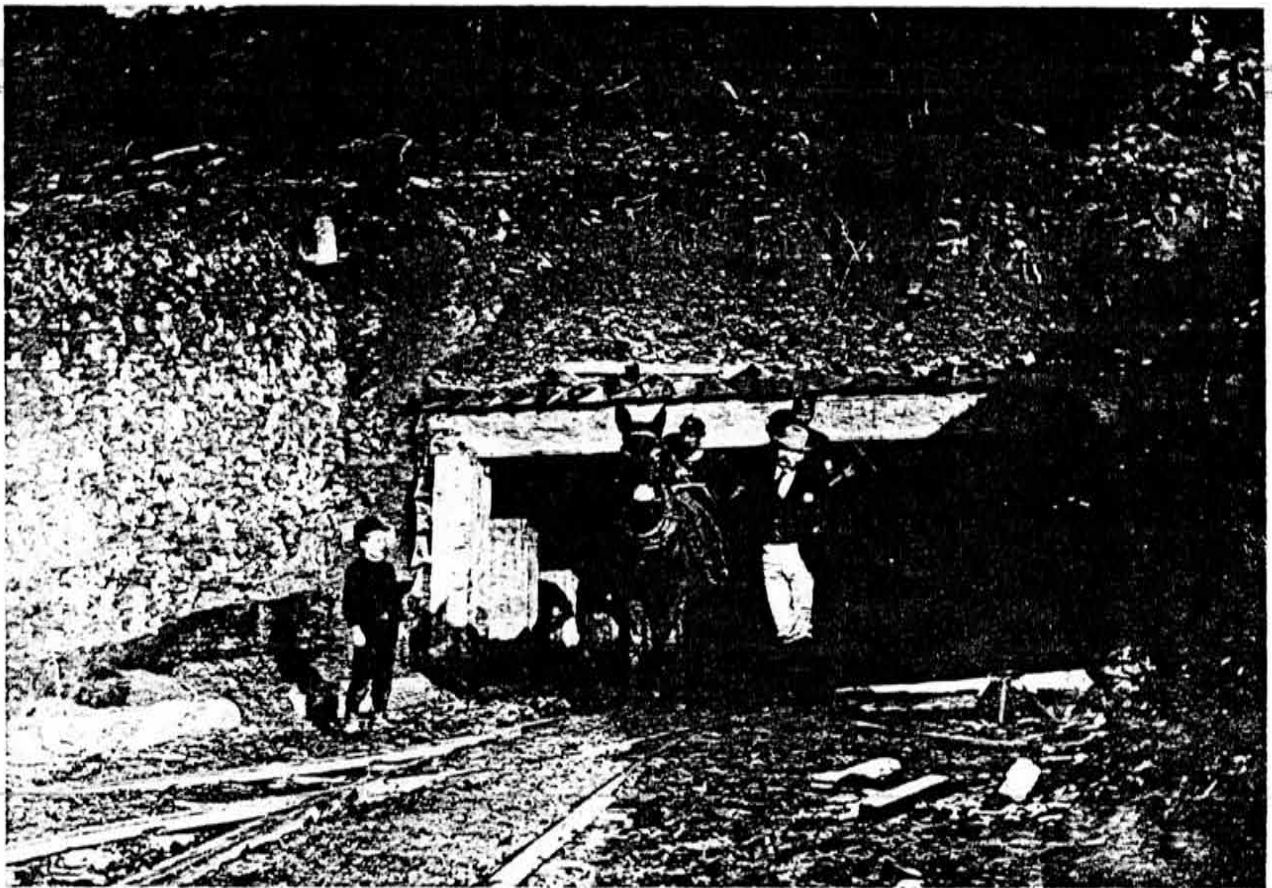
MARTHA
MINNIE

JACKSON
JAMES

ABOUT 1877

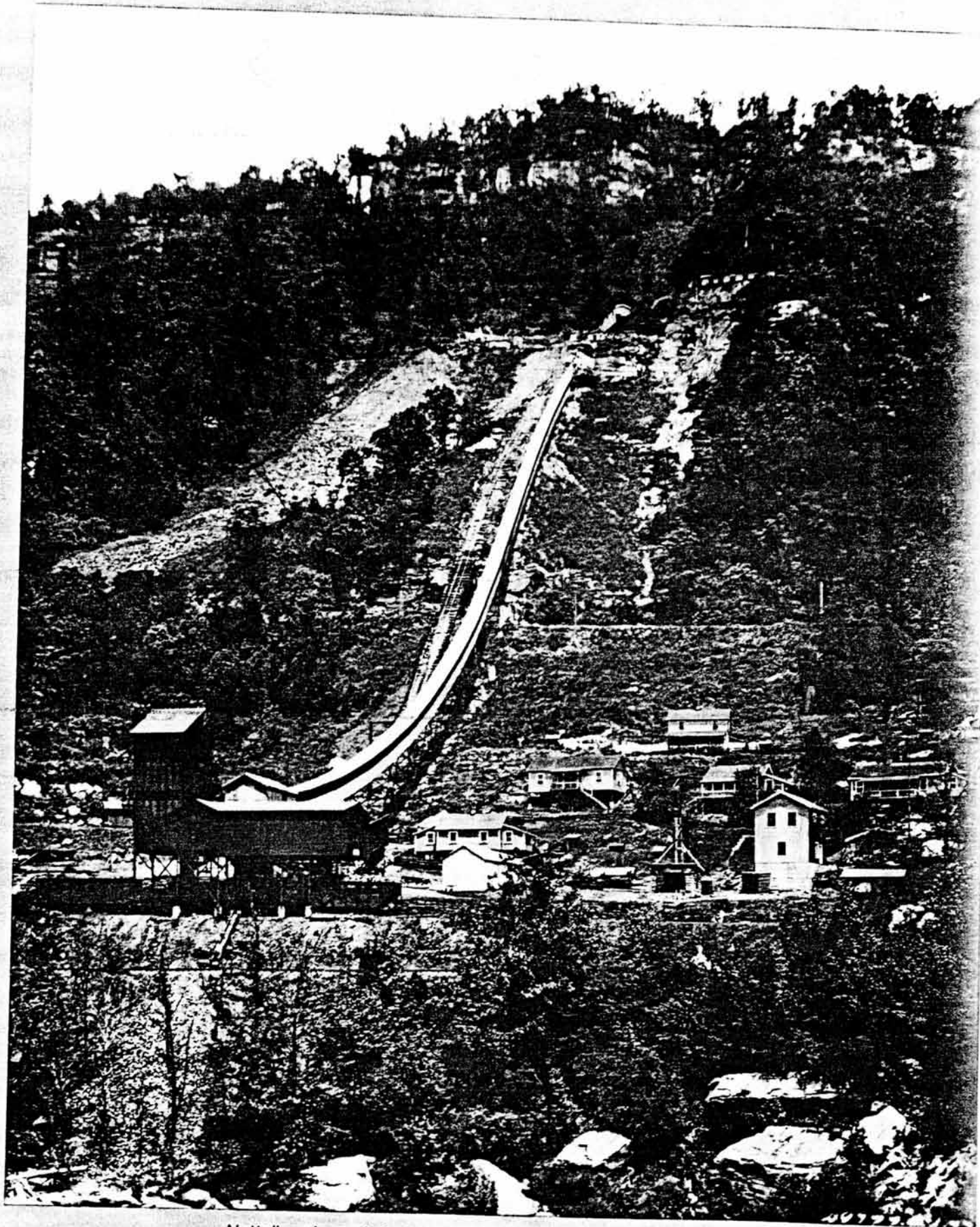


NUTTALL TIPPLE

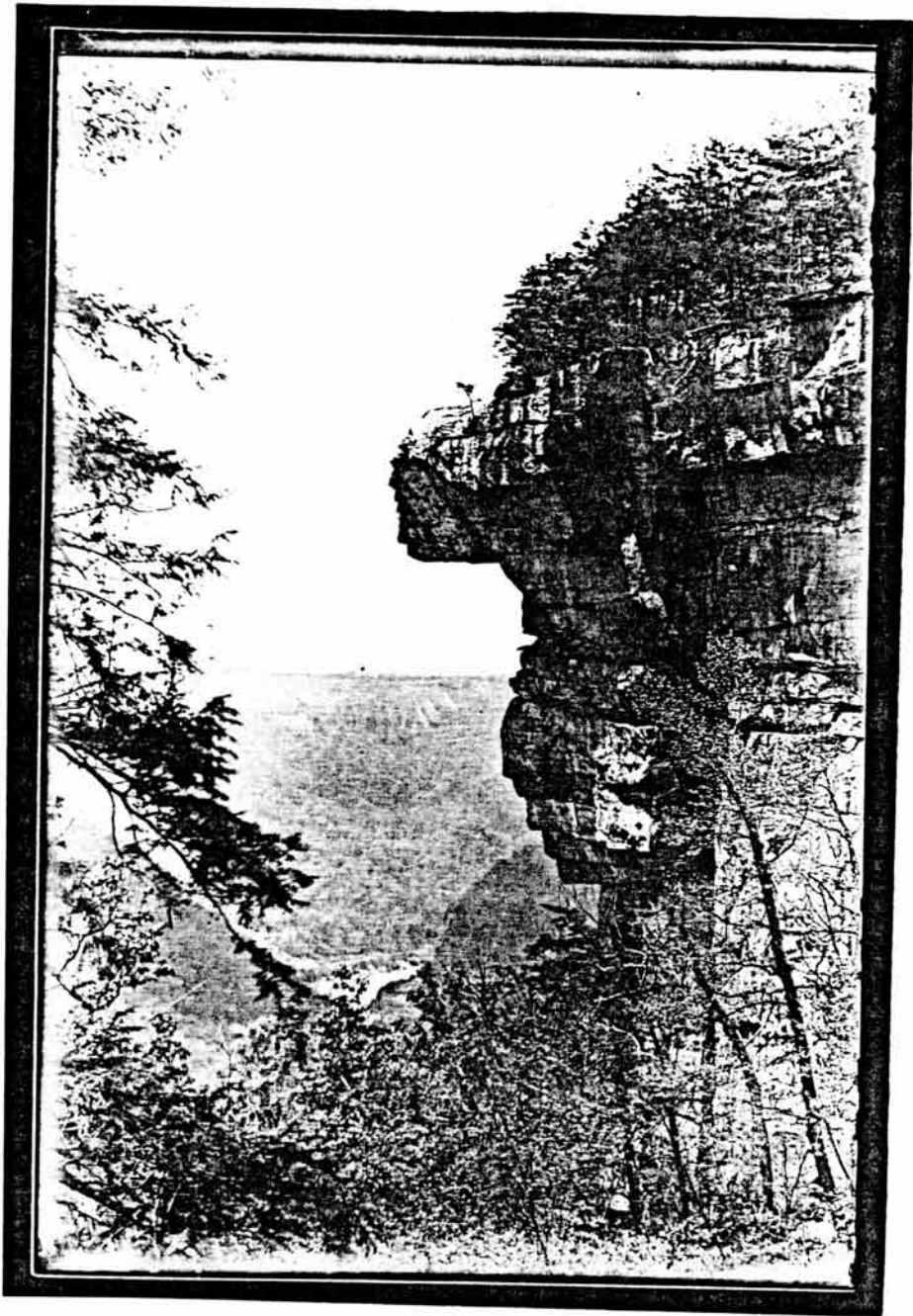


TAYLOR BOY

NUTTALL MINE DRIFT



Nuttalburg's coal tipple and conveyor, in the New River canyon.



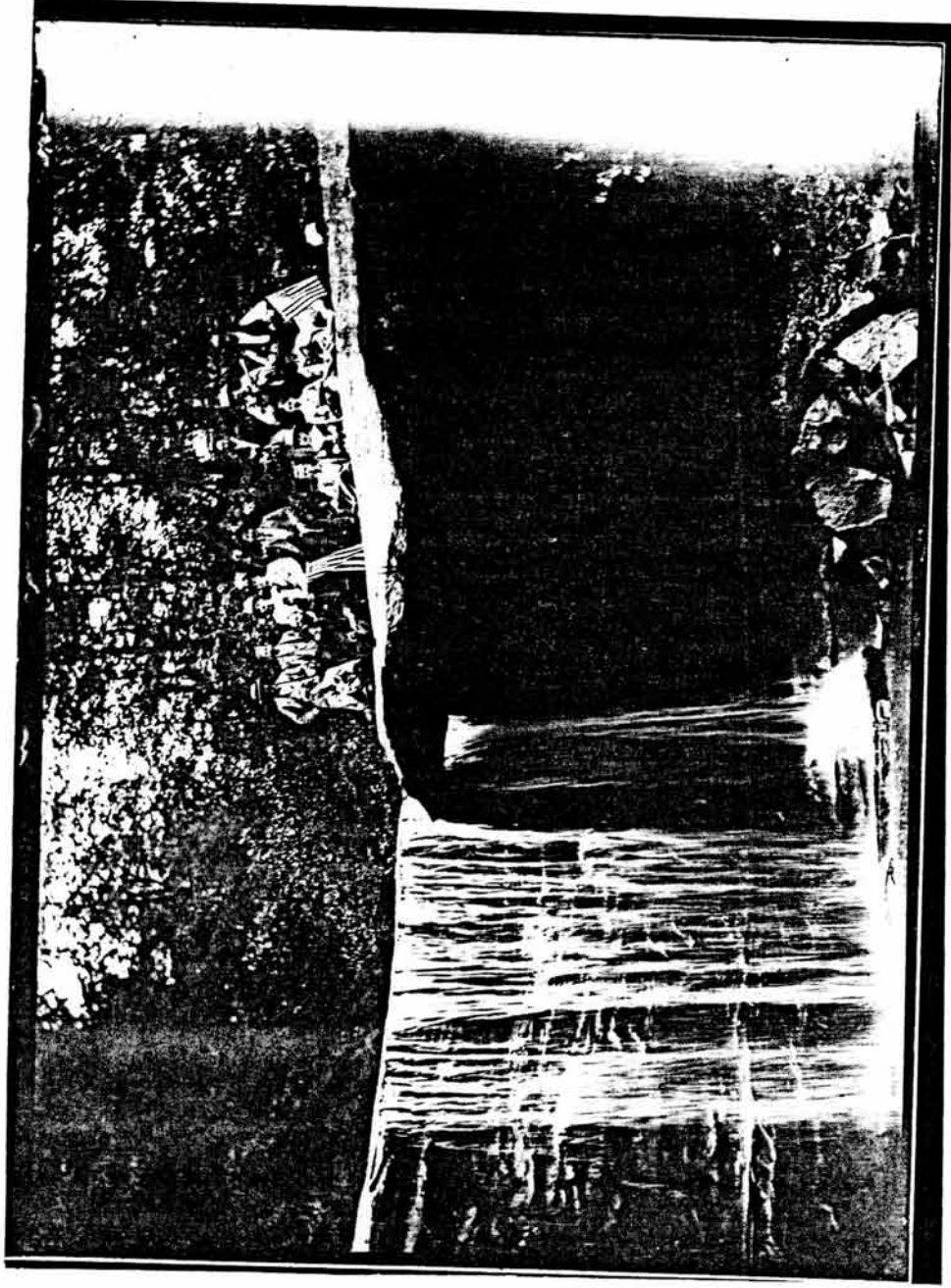
SPHINX ROCK



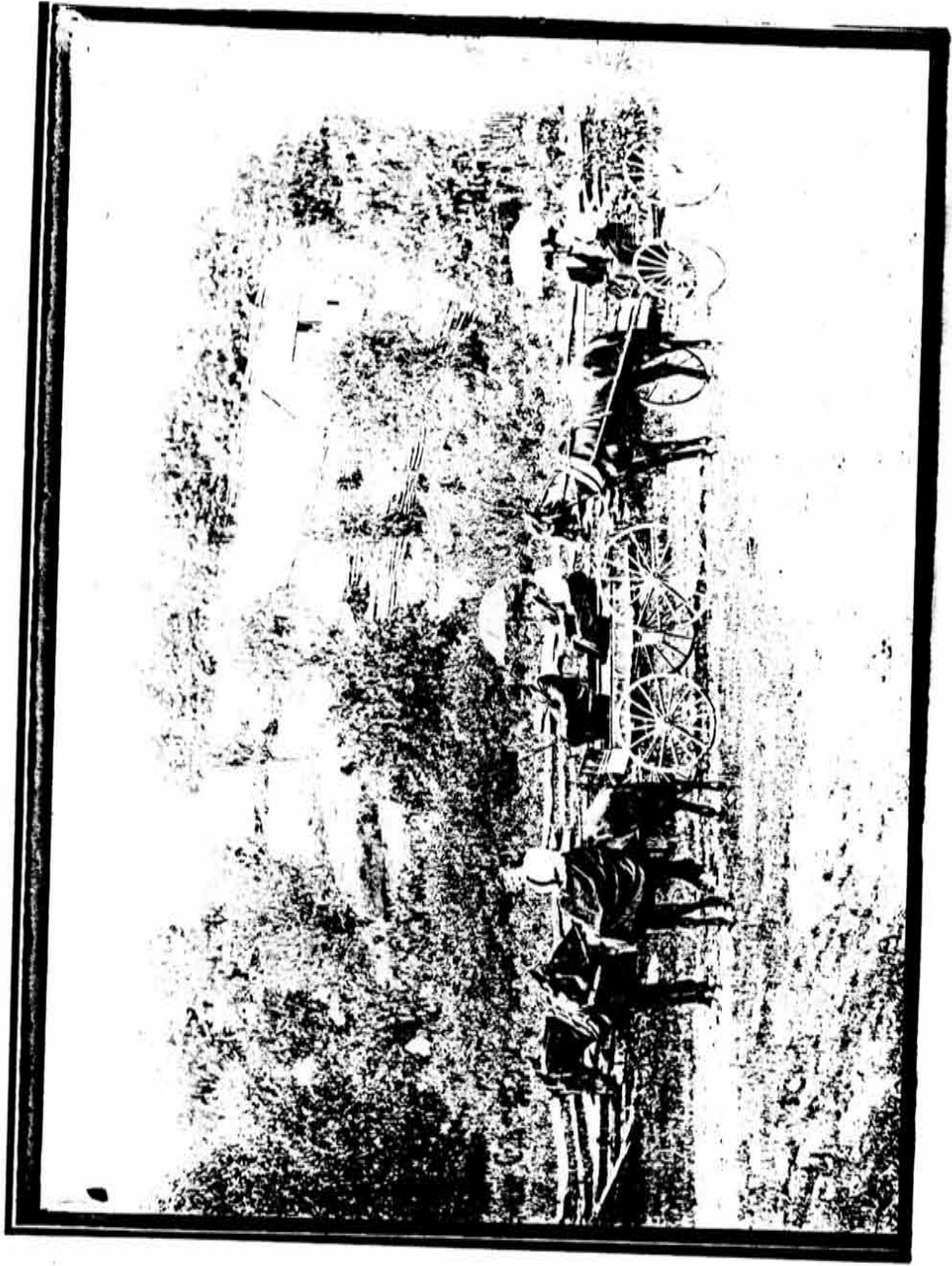
4TH OF JULY 1895

FRED RAVEN
JOHN TAYLOR
NEVA
MERCER TAYLOR
MINNIE TAYLOR

HOLLAND GIRL
HERBERT ROTHWELL
HOLLAND GIRL



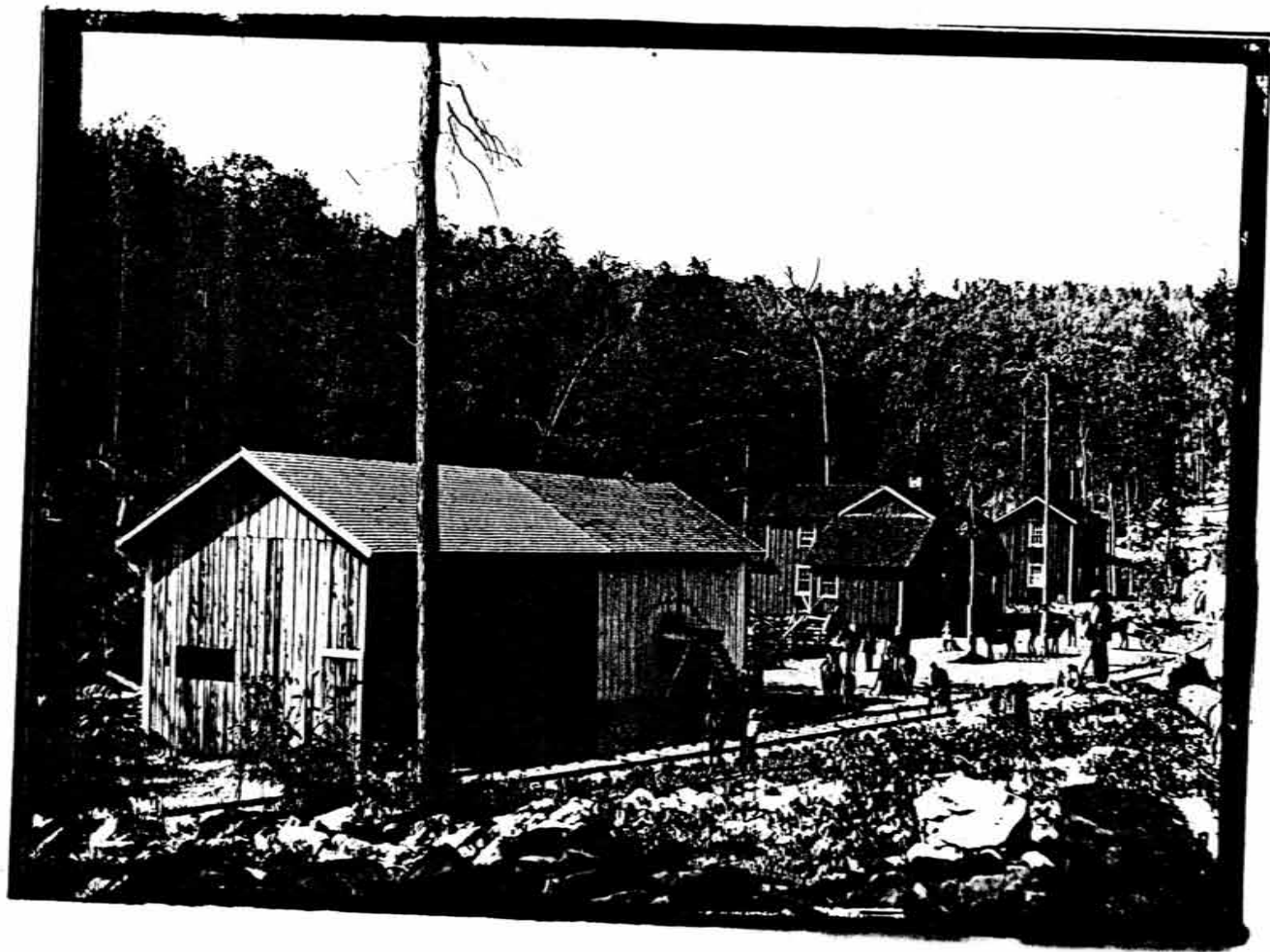
GROUP AT APTA OF JULY PICNIC AT GAUDE SPRING FALLS



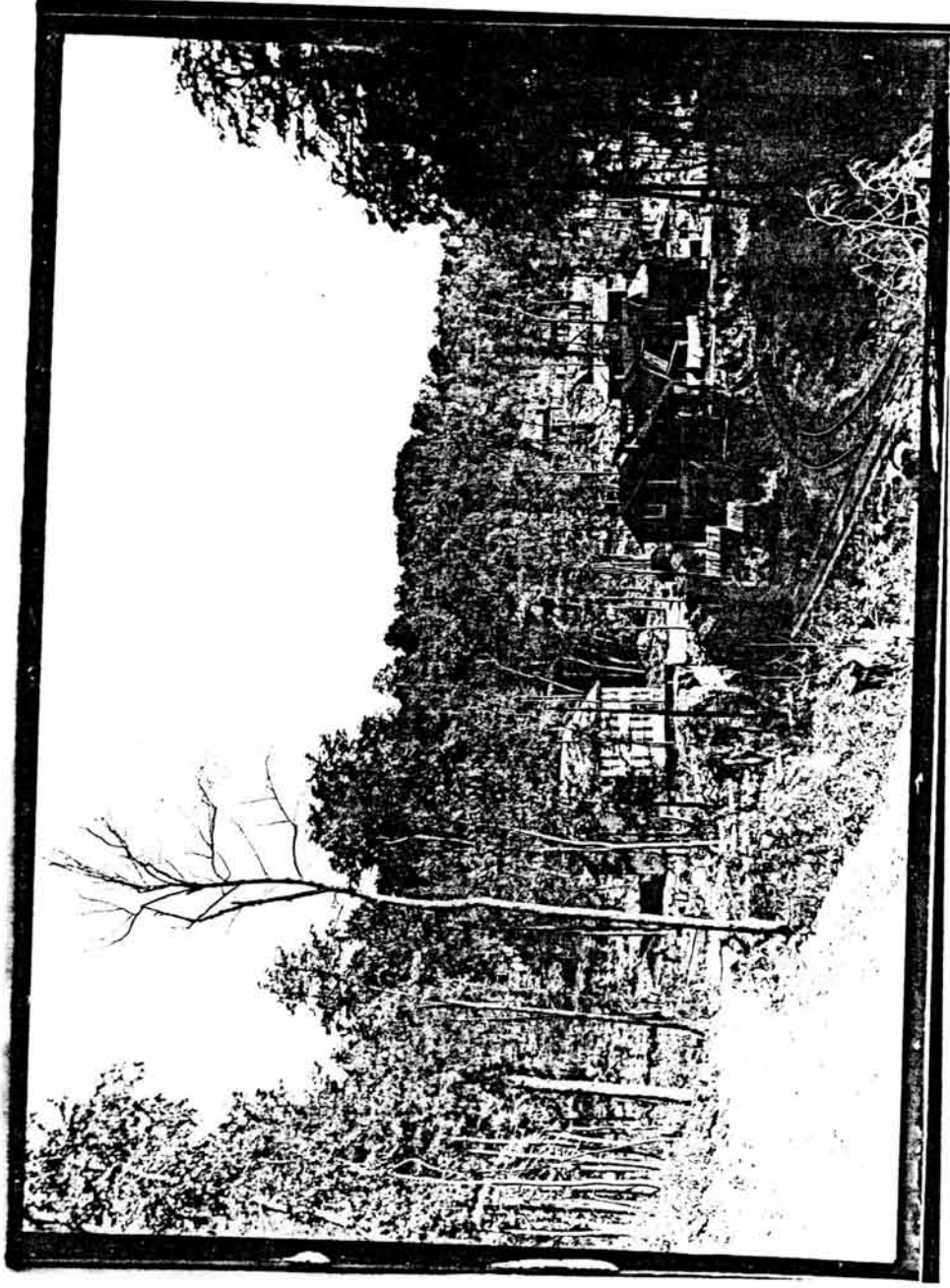
ON THE WAY HOME FROM 4TH OF JULY PICNIC 1895



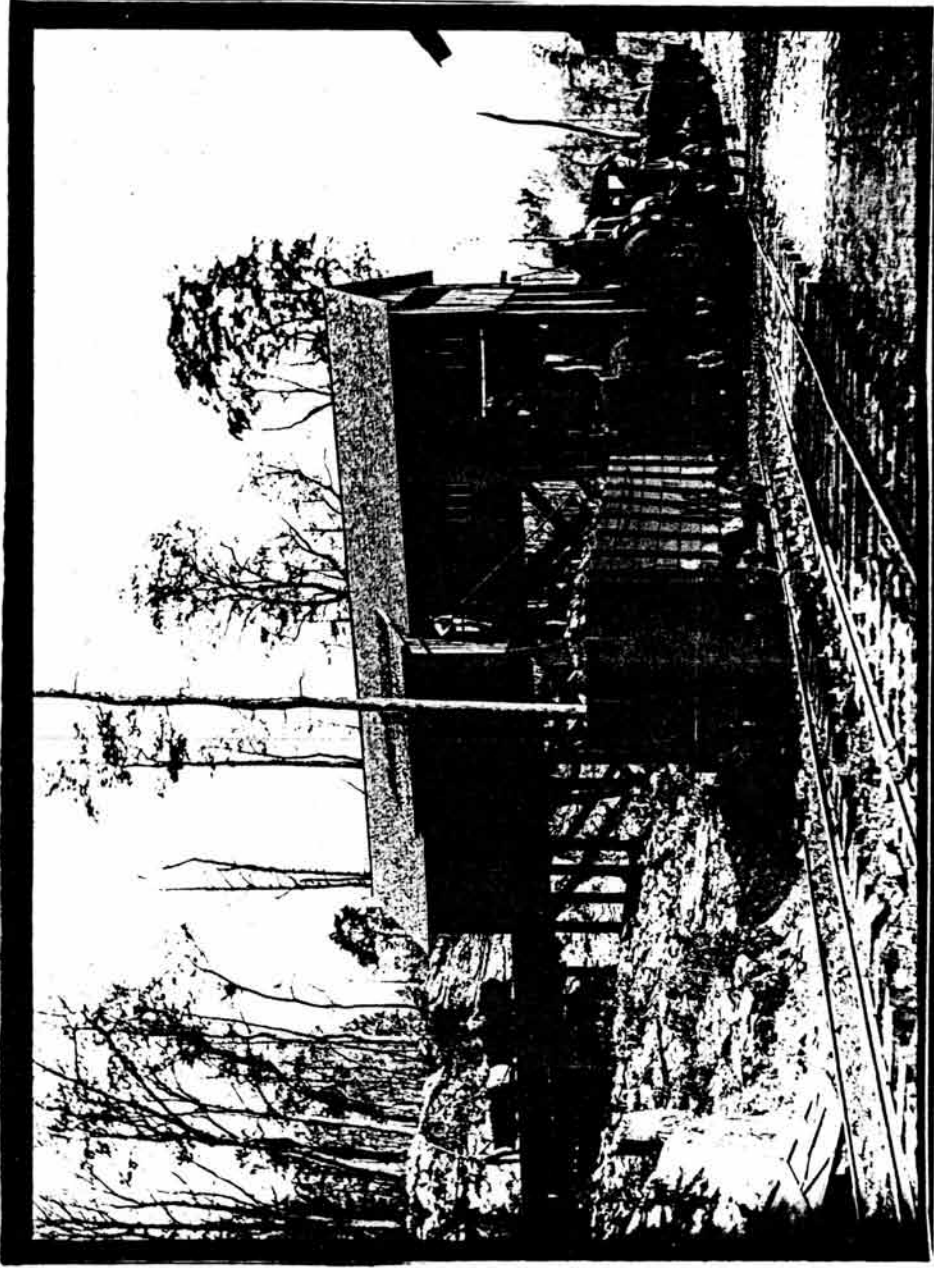
4TH OF JULY PICNIC 1896



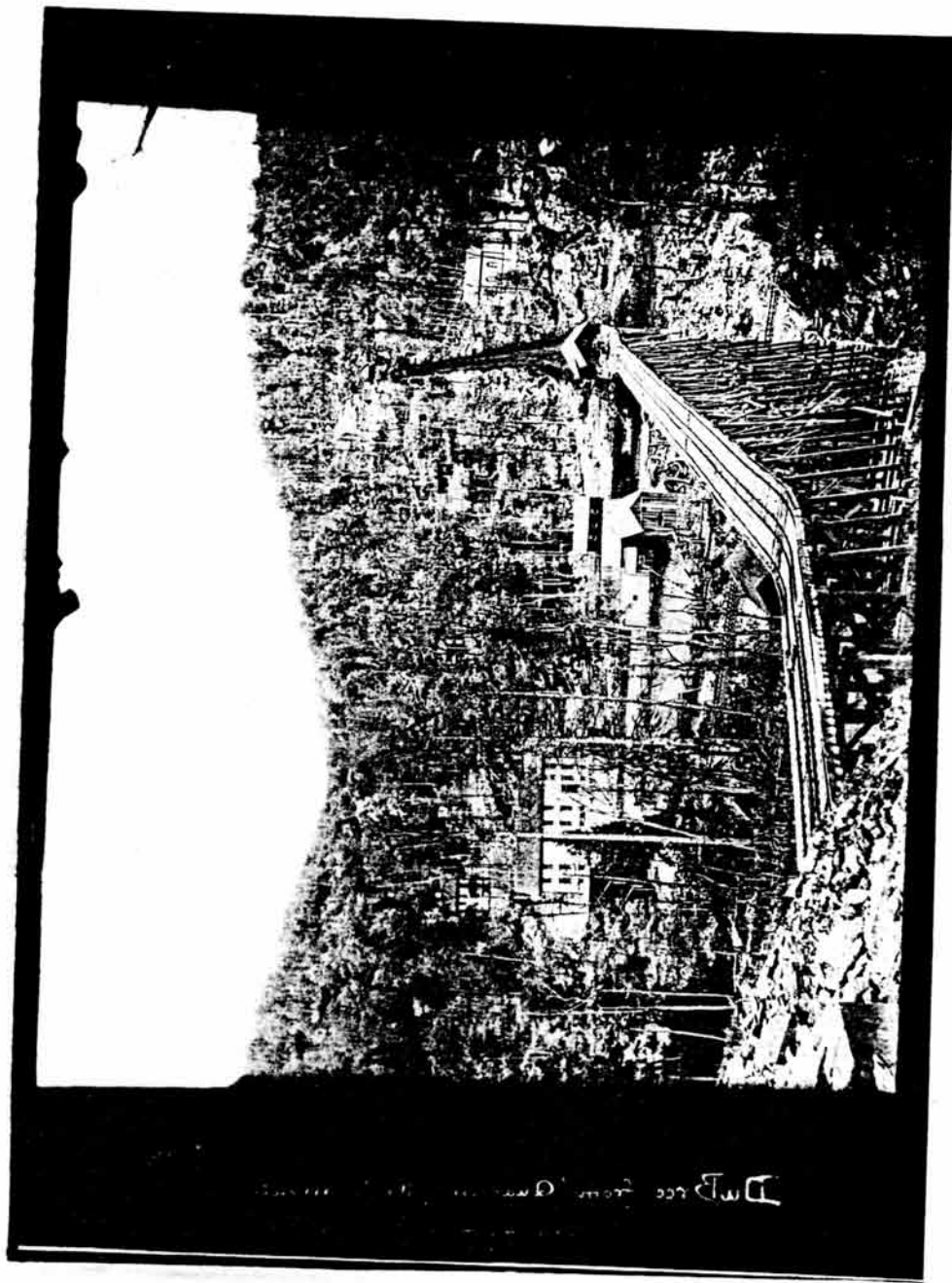
STABLE + HORSES DUBREE W. VA. 9/23/1896



DUBREE STORE AND BUILDINGS FROM LOOKOUT TRD. SEPT. 1896

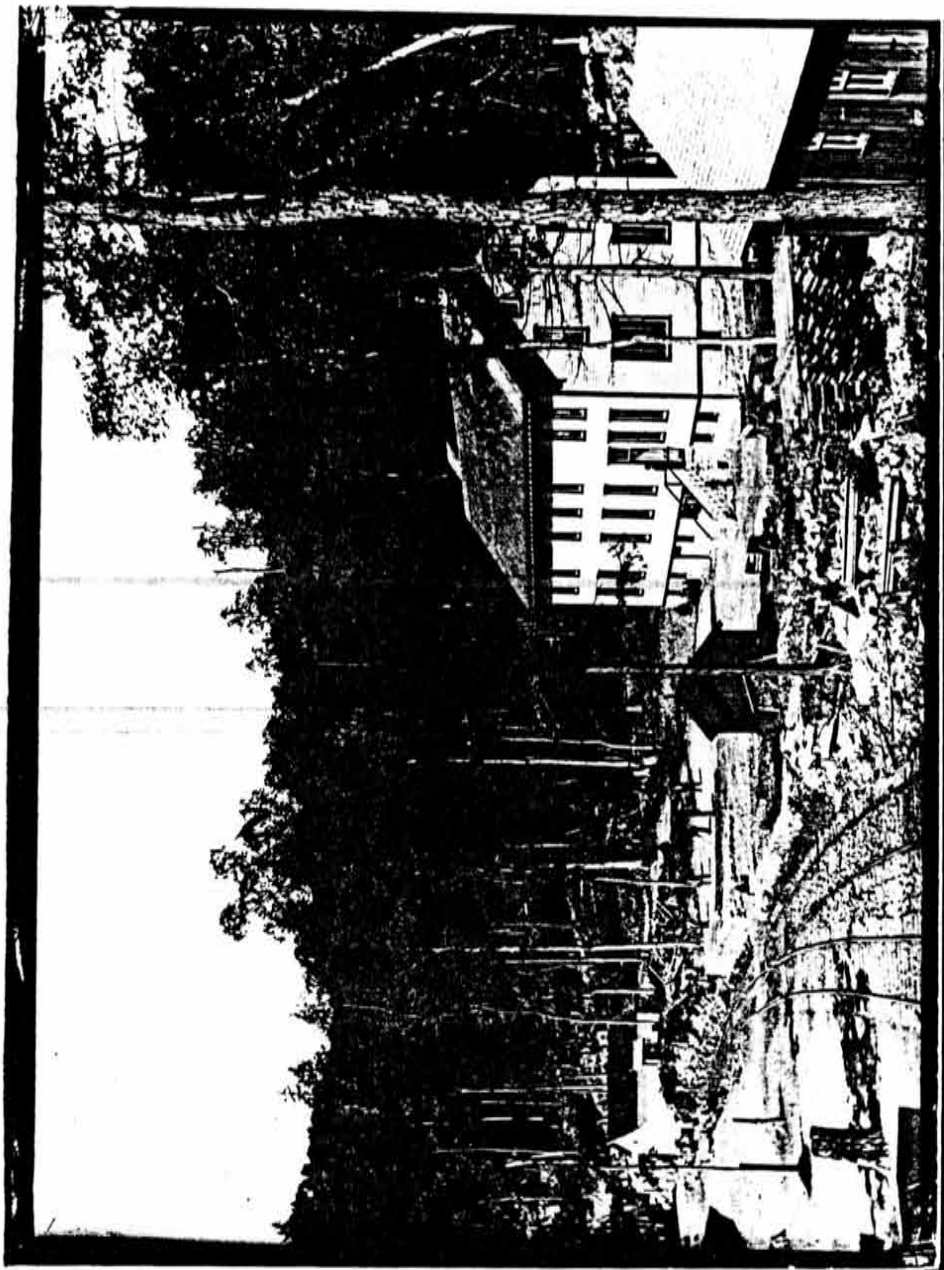


ROTHWELL COAL TIPPLE

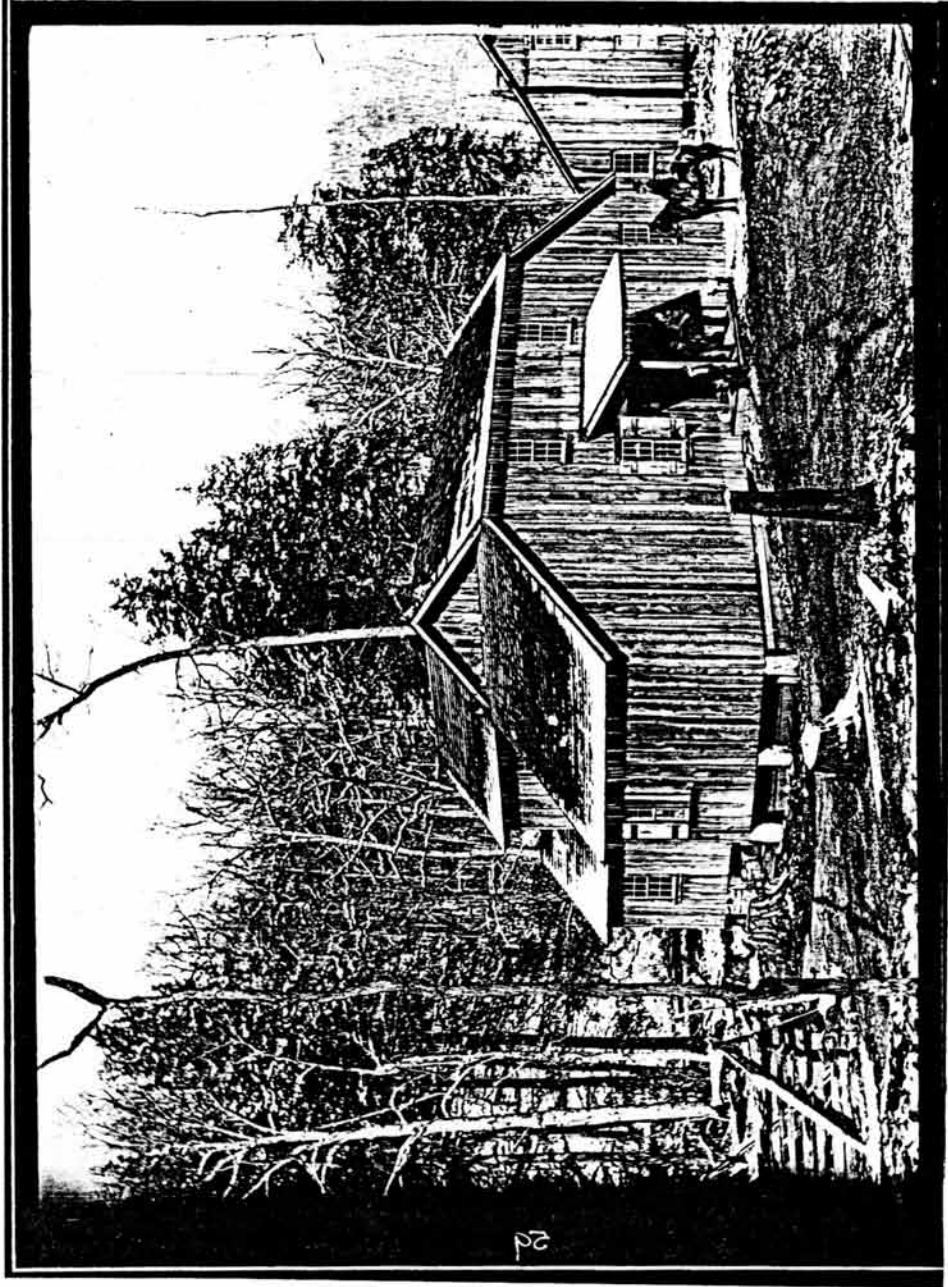


Dubree from Quarrier Driftmouth

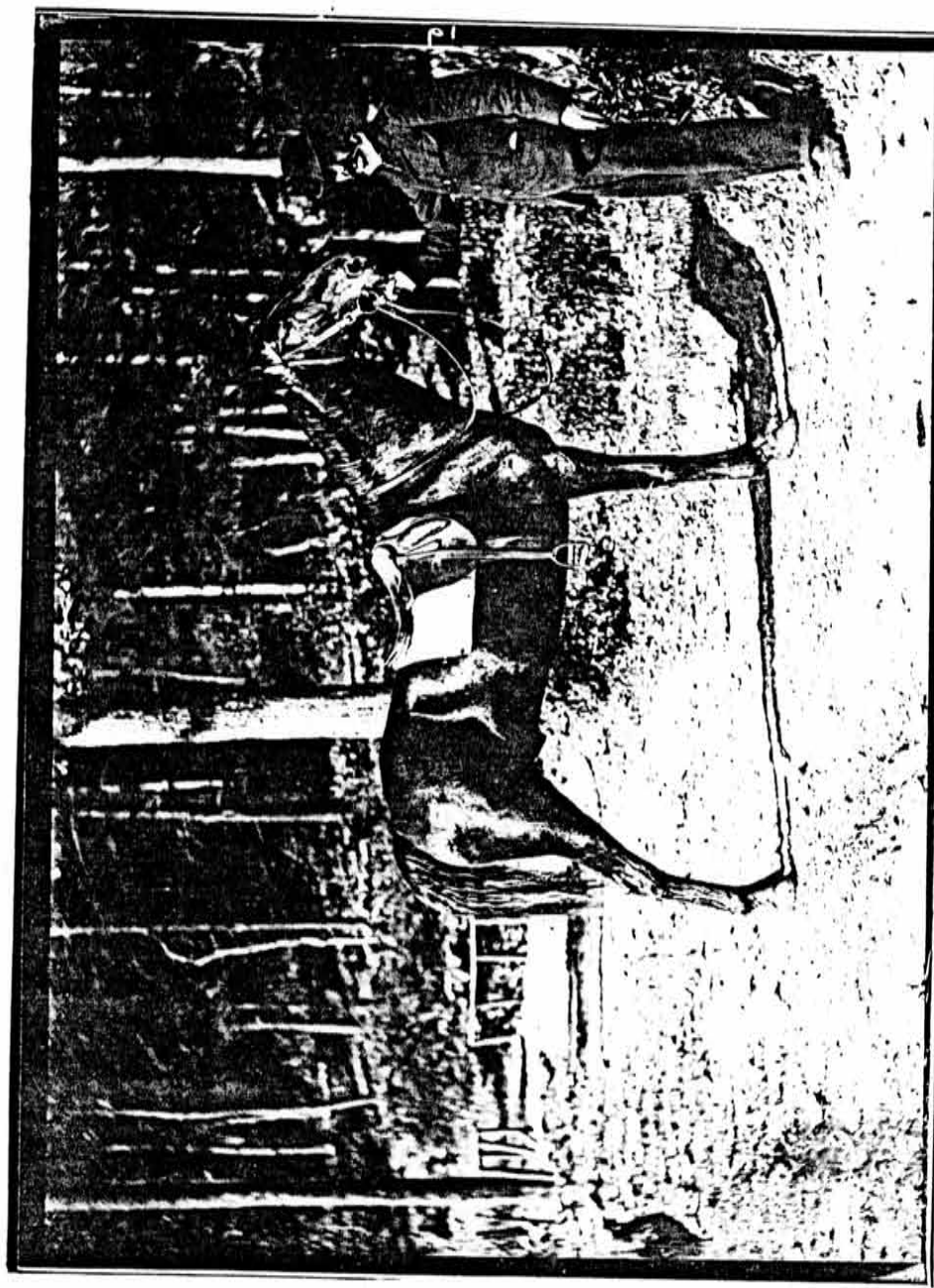
DUBREE FROM "QUARRIER" DRIFTMOUTH 10/27/1897



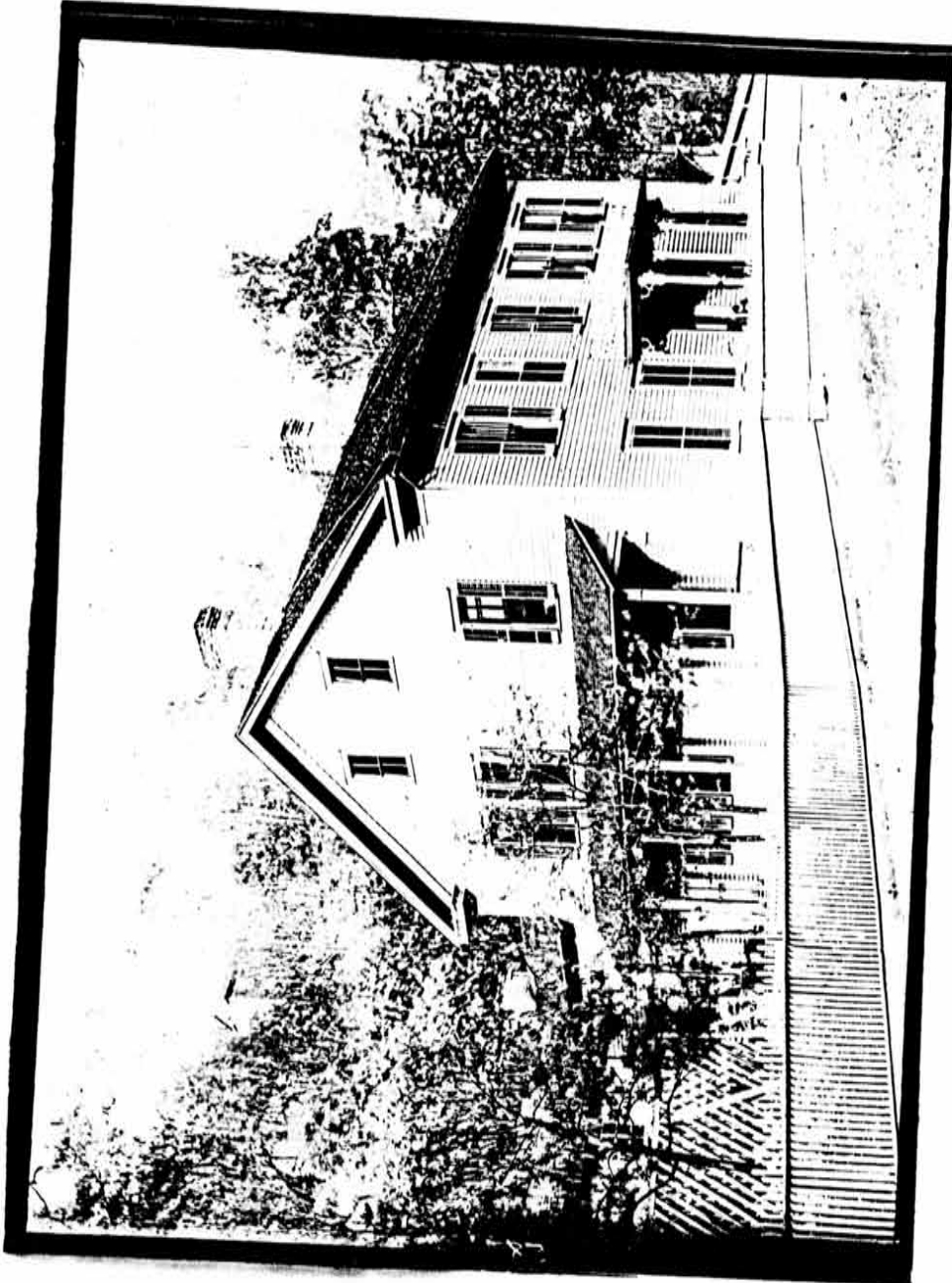
STORE AND YARD FROM TIPPLE DUBREE W. VA. 9/23/1896



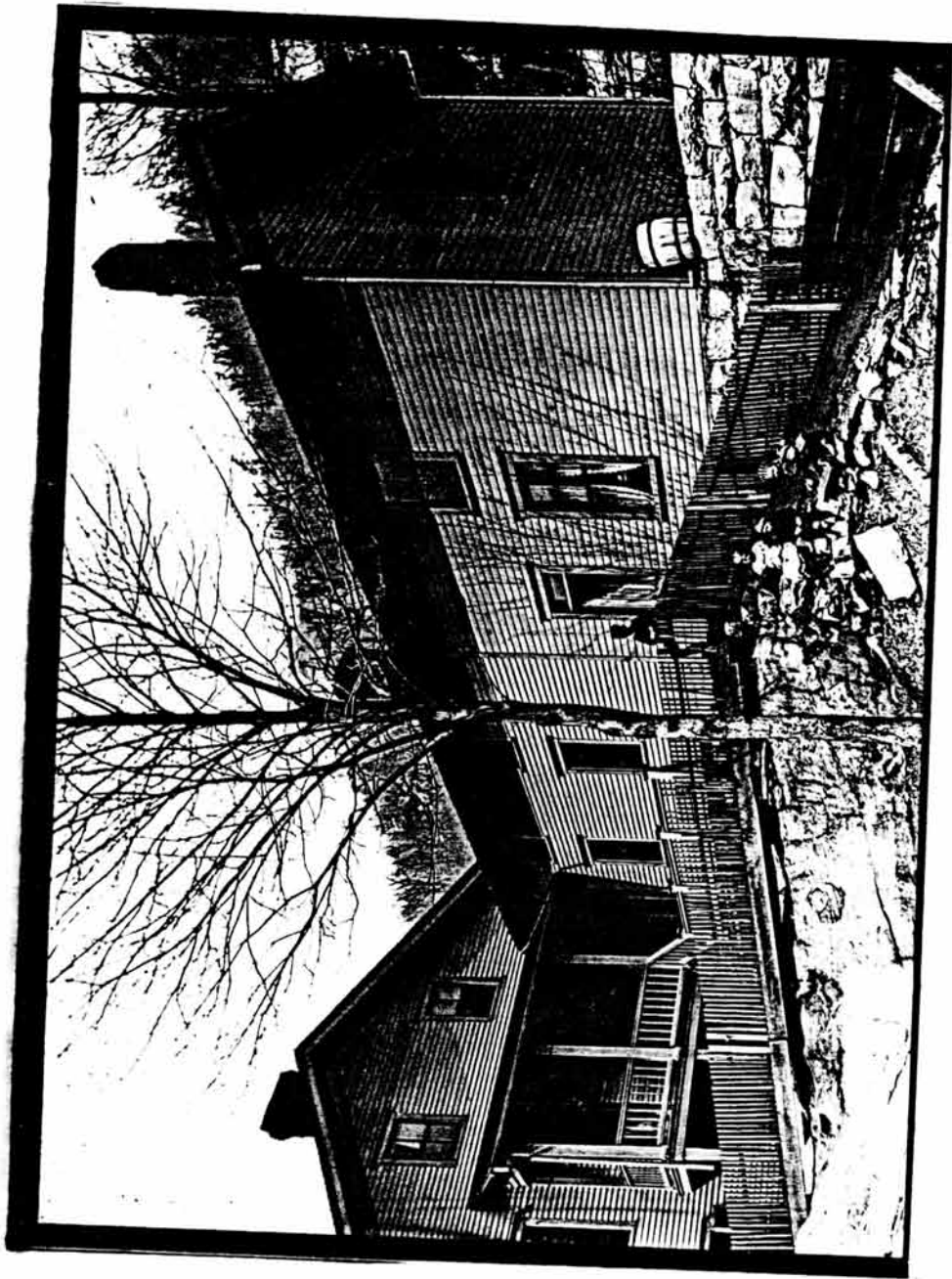
STORE AT ROTHWELL COAL CO.



FRED ROTHWELL & HORSE "TOM" 9/23/1896



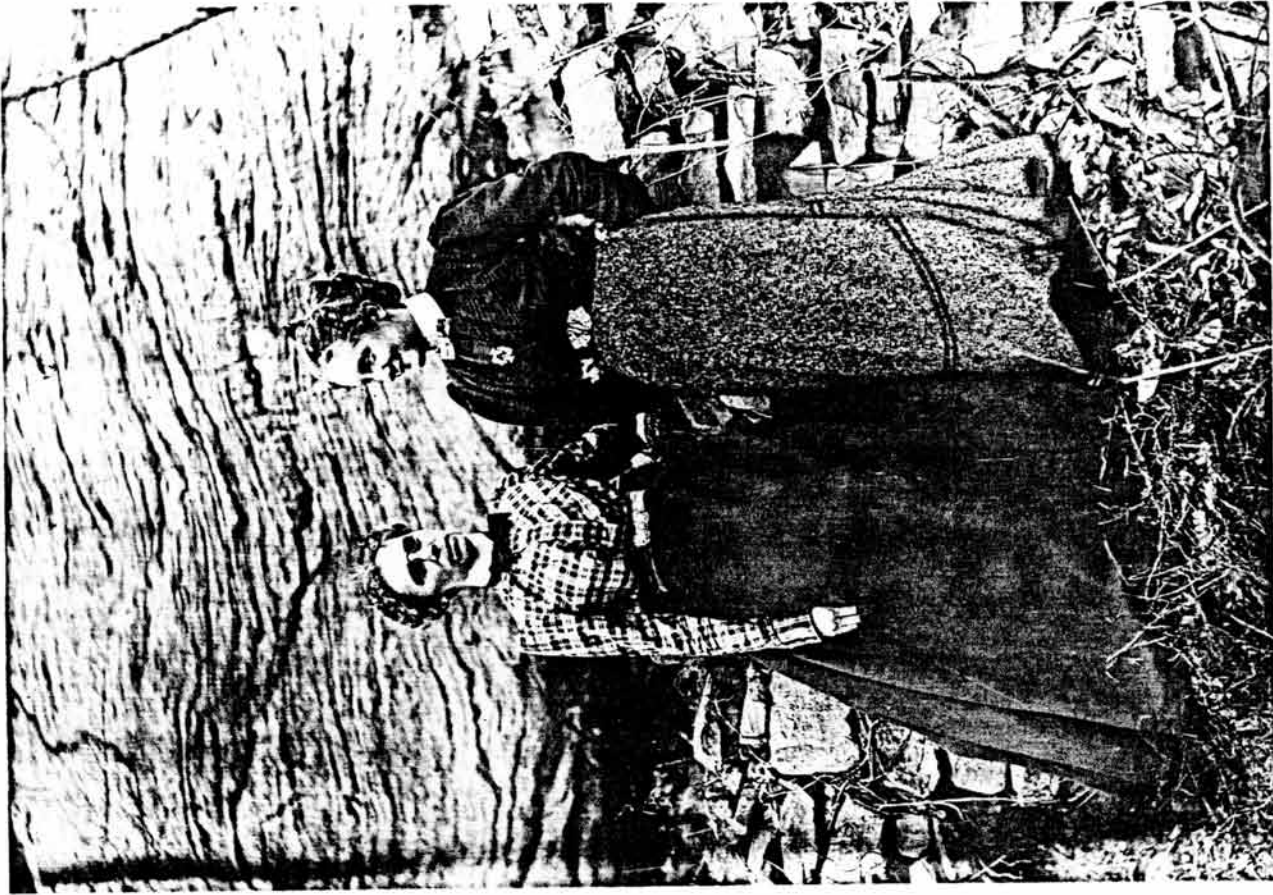
TAYLOR HOUSE AT NUTTALLBURG



FAST END TAYLOR HOUSE - NUTTAVIRB



JERRY, GOVERNESS TOM, ANDREW, GRACE, ALICE



MARY TODD + MINNIE TAYLOR



MARTHA AND "DIZZY"



MINNIE TAYLOR



MINNIE



GROUP AT HOLME FIELD
TOM MARTHA + JACKSON ALICE MINNIE
GRACE JERRY ANDREW



MARTHA N. TAYLOR

JACKSON

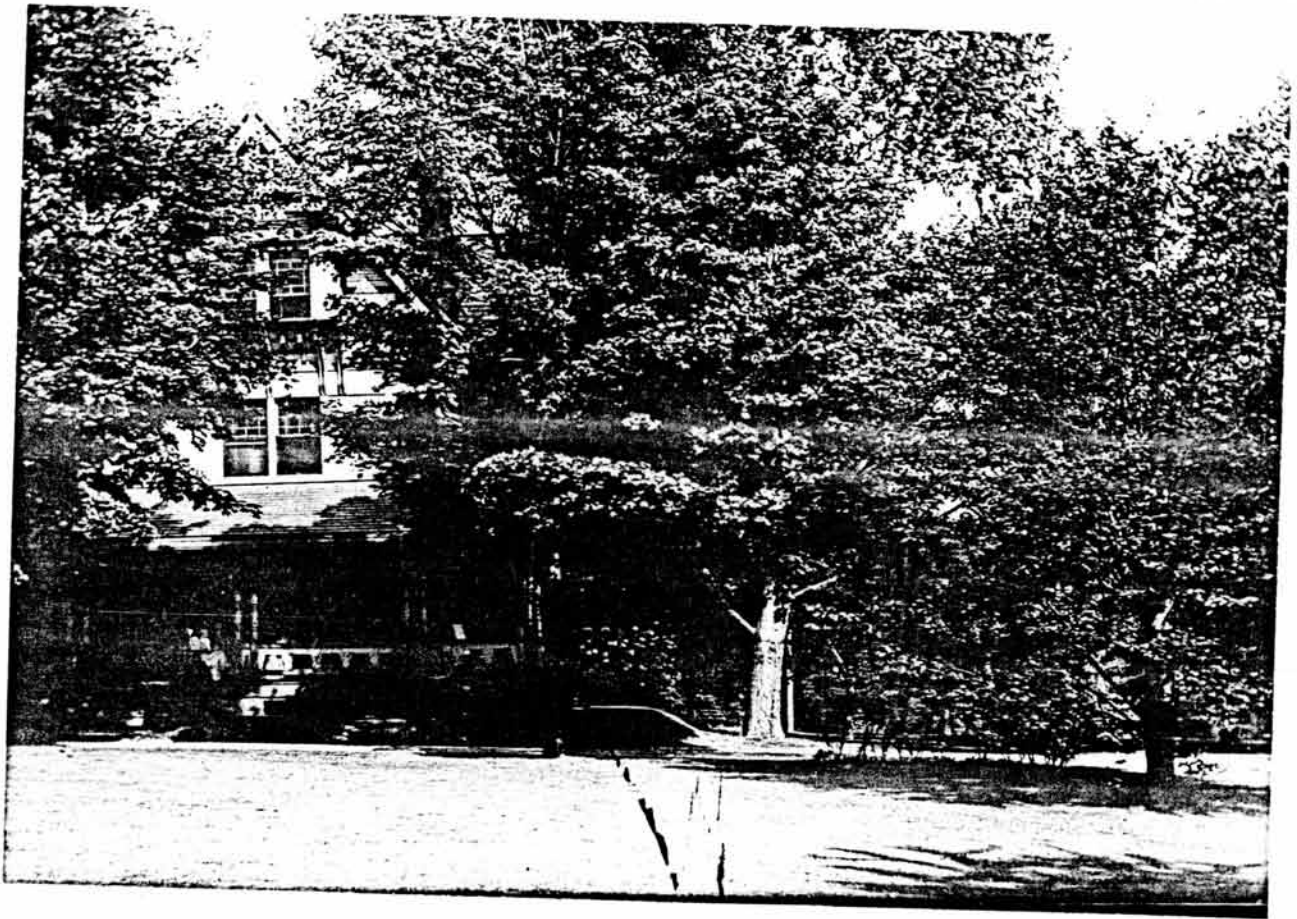
MINNIE

ON PORCH OF SWARTHMORE HOUSE



MARTINA

JACKSON



TAYLOR HOUSE ON ELM AVE. SWARTHMORE, PA.

PAT
+
ELIZABETH



PICNIC
NEW OXFORD, PA
c. 1930



TUCK



ELIZABETH

LALA



PAT

BETSY



ELIZABETH GRACE
MARY



BESSIE PAT

ELIZABETH



ELIZABETH



LALA BUZZY



JERRY



BETSY ELIZABETH



MARY

GRACE



BUZZY



LALA



GRACE MARY BETSY FUZZY



PAT ELIZABETH BETSY



JERRY PAT ELIZABETH LALA



BETSY



TOM



JERRY ANDY BESSIE



TUCK

Stories



CHILDREN CRAWFISHING



GRACE TAYLOR WITH "PARVIS"

TOM BEHIND HER

TOP - ELLA RUPERT

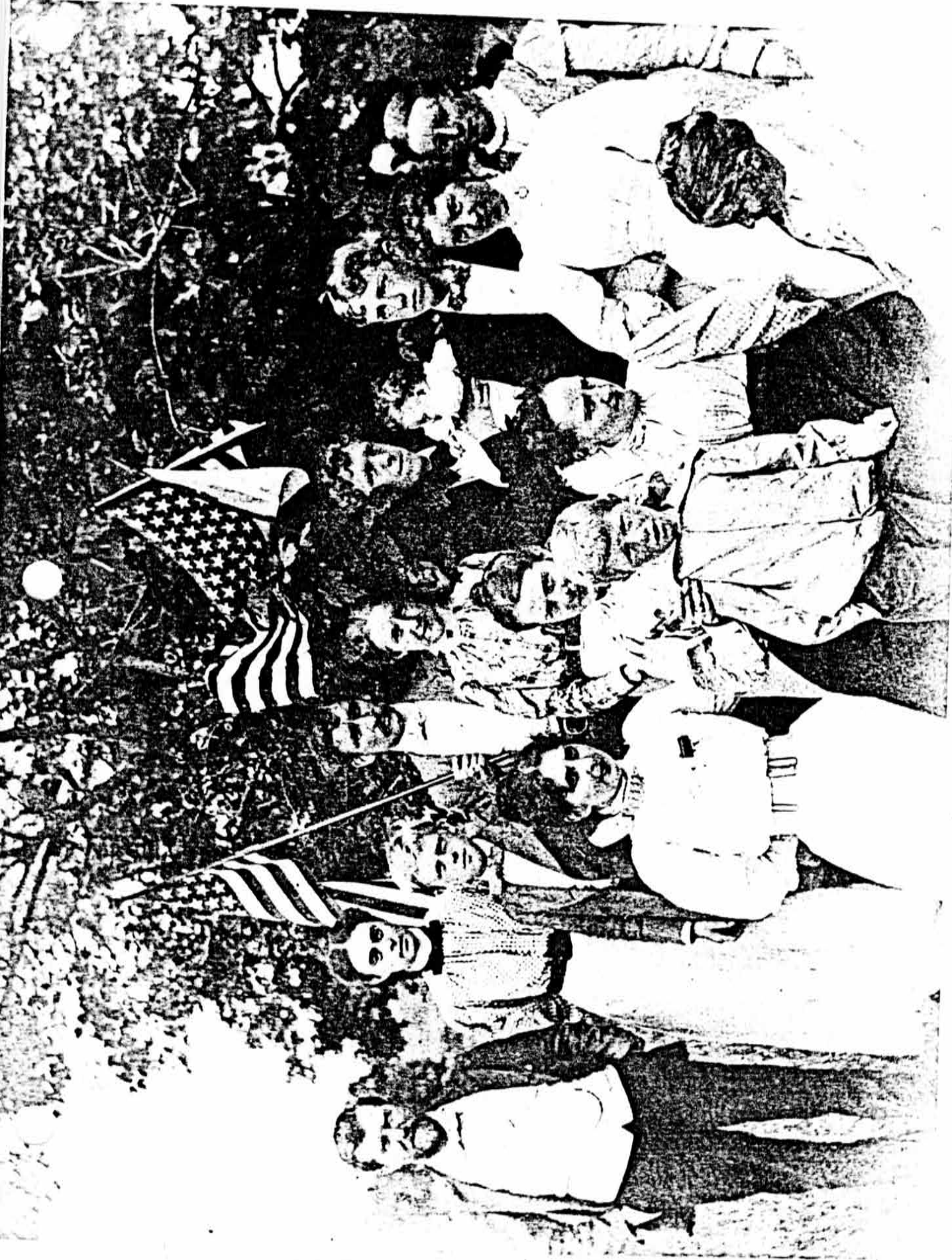
MARY EMLEY RUPERT

BROADUS RUPERT (BOTTOM RIGHT)

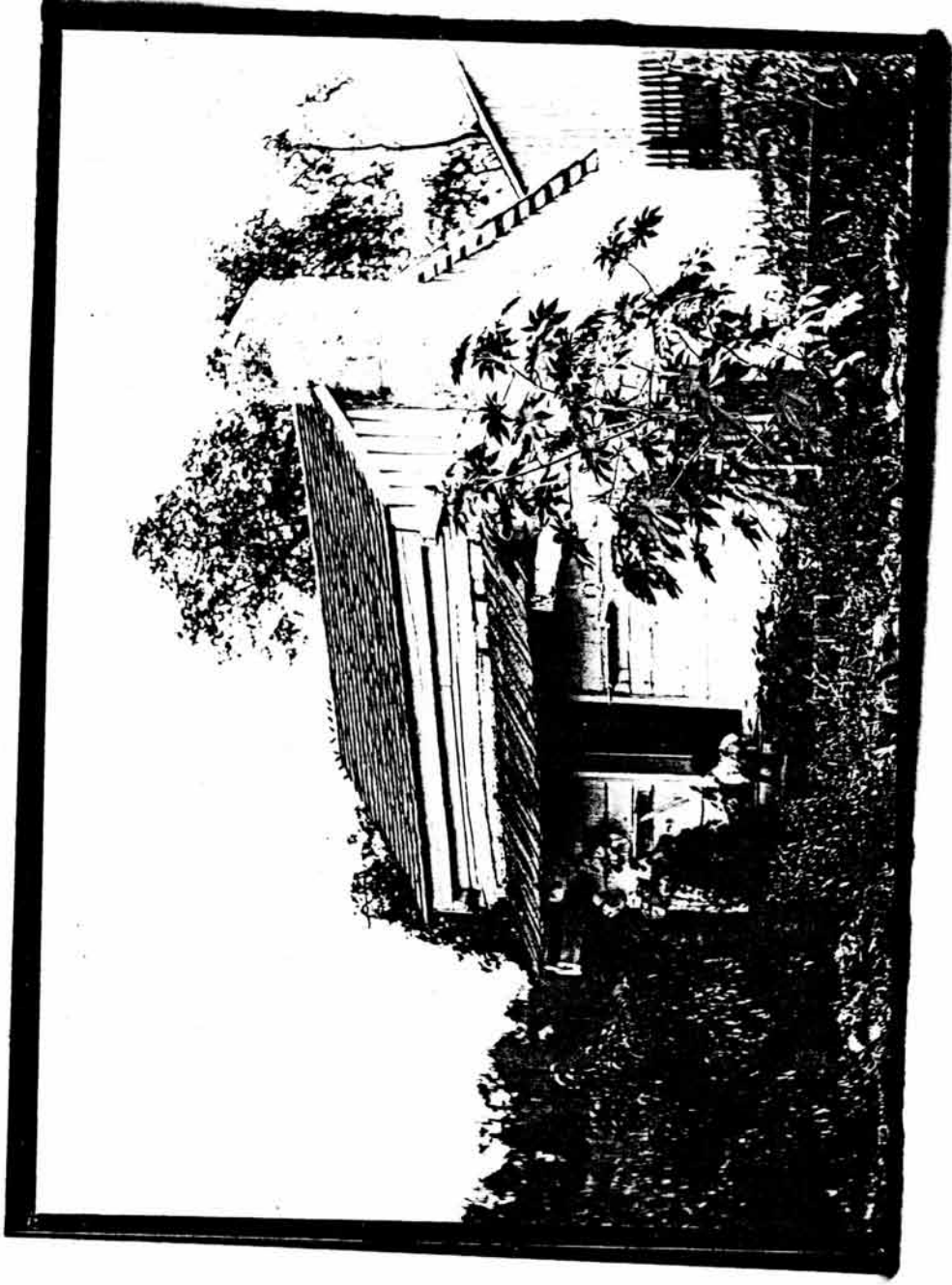
BERT RUPERT

+ GOVERNNESS

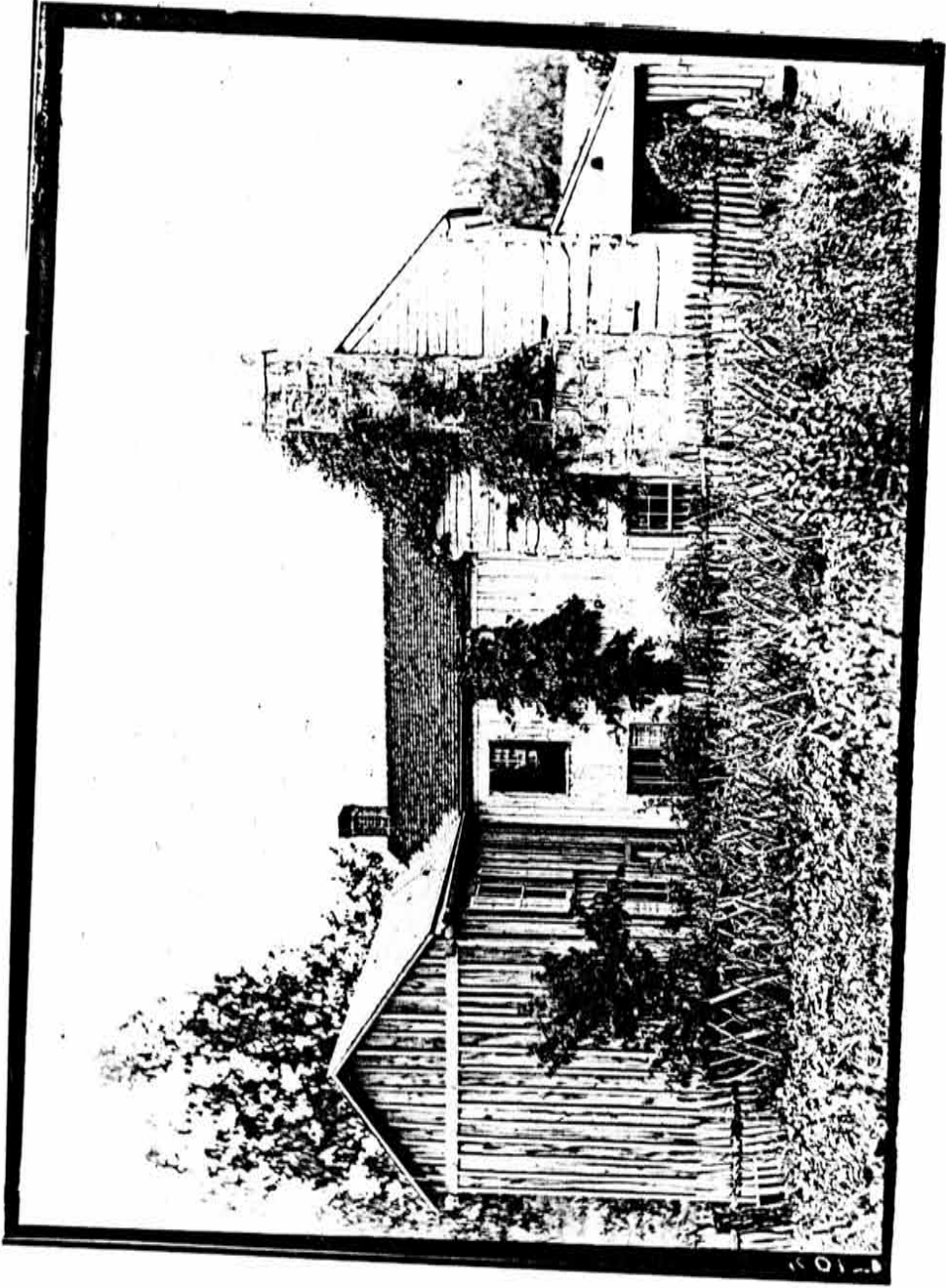
4TH
OF
JULY
HOLMEFI
1898



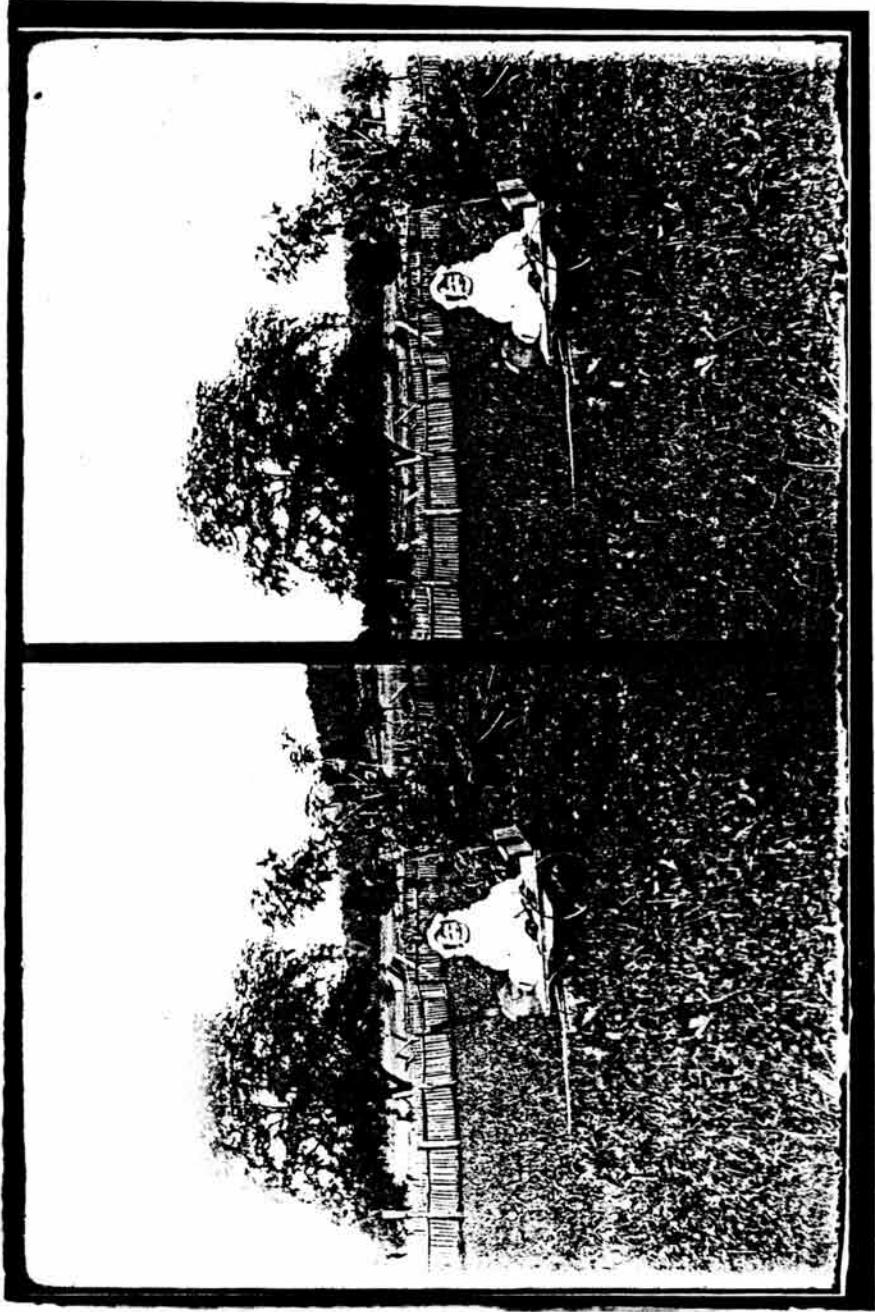
JACKSON FLORENCE FIELD FRED RAVEN MINNIE JOHN MARTHA JERRY MARTHA N. TAYLOR
 ANDREW FLORENCE HARRINGTON TOM NIEVA MEISER TAYLOR ALICE
 MAY ROTHWELL MINNIE FOSTER GRACE



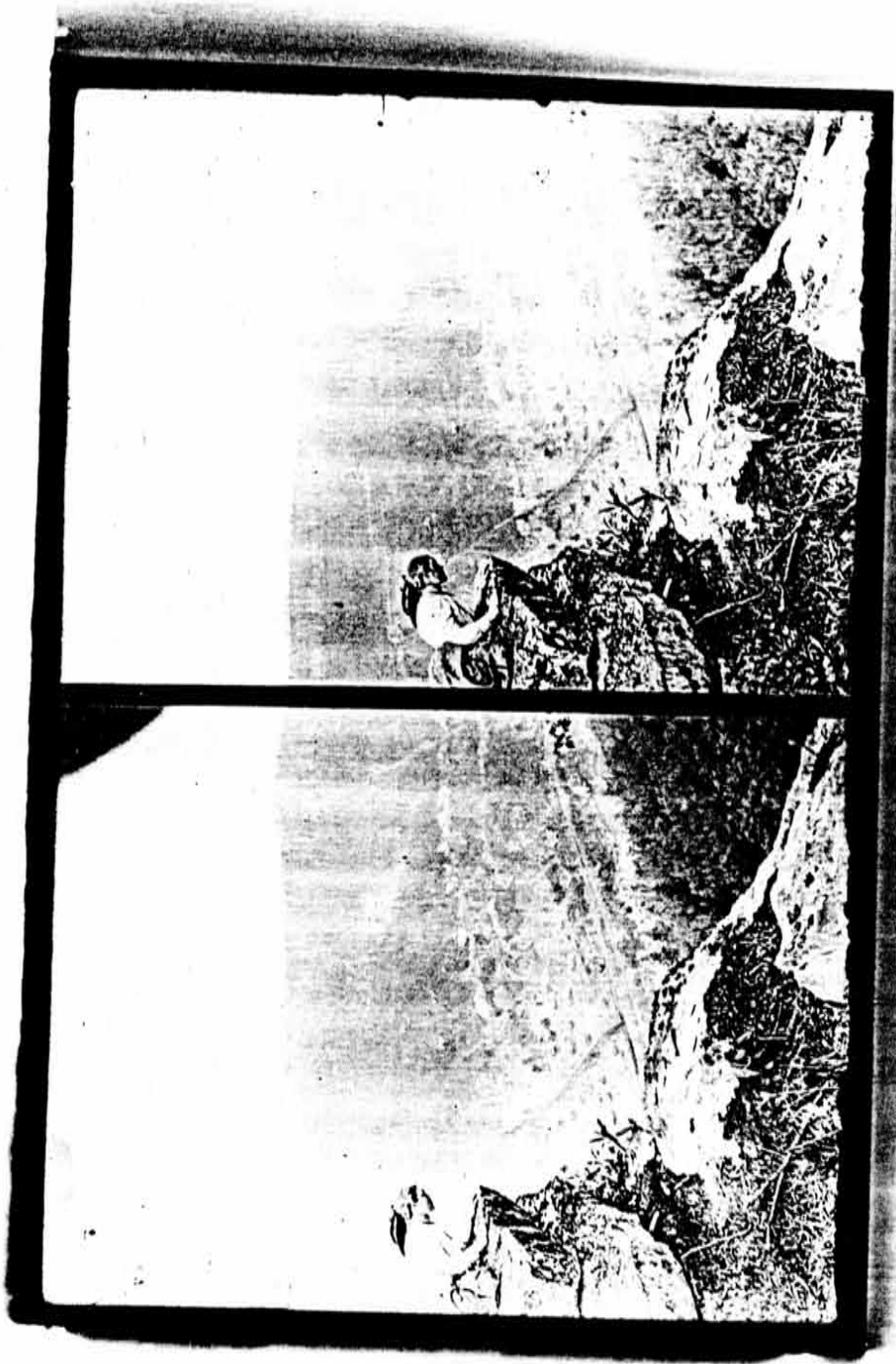
"WAITING FOR CALLERS" LITTLE HOUSE AT HOLMEFIELD



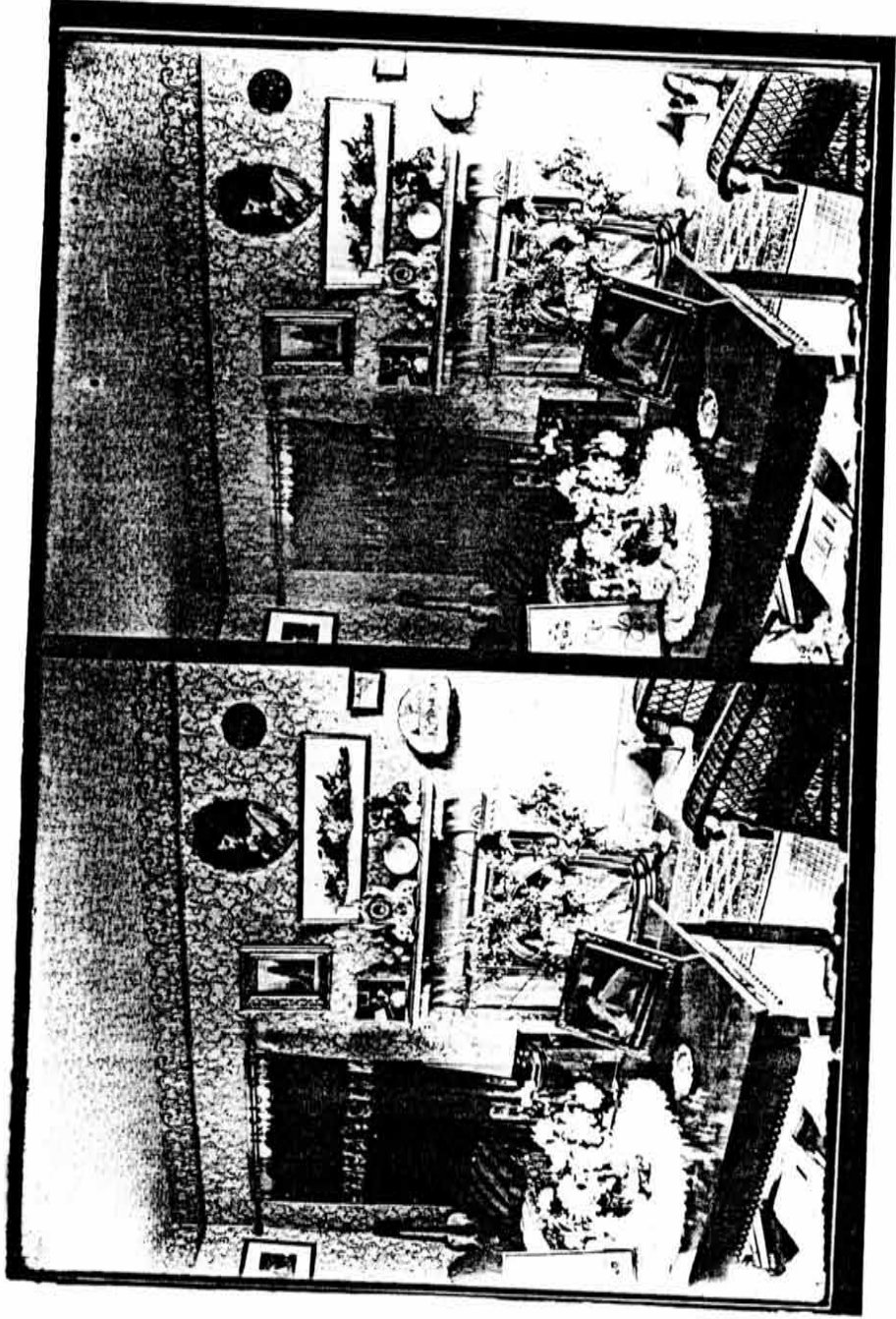
HOLMEFIELD - 1897



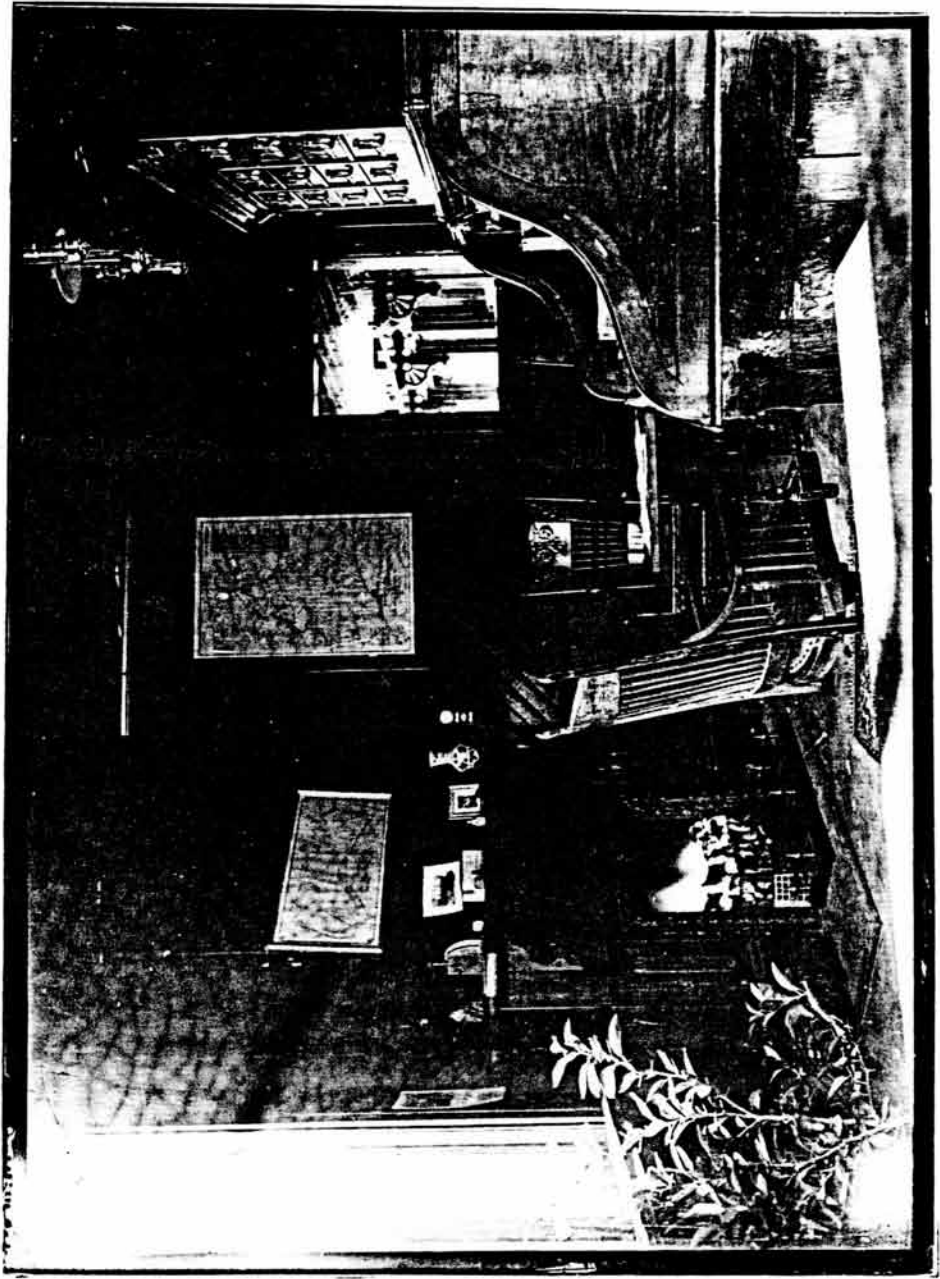
MARTHA AT HOLMEFIELD



ALICE LOOKING DOWN FROM CLIFF ABOVE BROWN'S



TRAVENIS FRONT PARLOR - NUTTAN



INTERIOR DOTHUELL COAL CO. OFFICE

Elizabeth Taylor McLaughlin, author and lover of poetry has suggested inclusion of the following poem by George Herbert.

"THE ELIXIR"

Teach me, my Lord and King
In all things to see
And what I do in anything
To do it as for thee.

This is the magic stone
That turneth all to gold
For that which God doth touch and own.
Cannot for less be told.

JACKSON TAYLOR

TRIP RECORD

Inside Cover - Trans. to Rawtenstall.

| | | | | | |
|-------|-------|-------|------|-------|------|
| 5.48 | 7.29 | 8.23 | 8.58 | 10.08 | |
| 10.58 | 11.38 | 12.43 | 1.38 | 3.18 | 4.43 |
| 6.28 | 7.08 | 8.43 | 9.38 | | |

From Rawtenstall.

| | | | | | |
|------|------|------|------|------|------|
| 2.33 | 3.28 | 4.16 | 5.22 | 5.40 | 6.22 |
| 7.31 | | | | | |

Bus to Love Clough - 11.55 1.45 3.25

Jas. Edwards
76 Hall Street
Southport

Shop on Kenyon Road

18 Bold Street R. Sutcliffe
111 Avenue Parade Blackburn.

Hotel de Faubarg,
Rue St. Honore

J. H. Parkinson & Co.
Oxford & Dover Streets

R. A.

Dr.

To Cash 300.00

Cr.

| | |
|---------------------|-----------------|
| By Cash | 25.00 |
| June 2 By Cash | 10.00 |
| June 13 By Check | 28.00 |
| June 13 By Check | 25.00 |
| June 27 By Check | 5.00 |
| June 28 By Check | 14.1.0 |
| June 30 By Check | 4.14.8 |
| | <u>111.15.8</u> |
| Boy Bal. to July of | 188.4.4 |
| | <u>£300.0.0</u> |

R. A. in account with R. A.

| July 2 | |
|-------------|----------------|
| By Cash Ck. | 11.12.0 |
| By Check | 30.0.0 |
| By Check | 5.0.0 |
| By Check | 15.0.0 |
| | <u>61.12.0</u> |

| | |
|---------|-----------------|
| To Bal. | 188.4.4 |
| | 61.12.0 |
| | <u>126.12.4</u> |

| July 28 | |
|--------------|-----------------|
| Aug. 13 Cash | 20.0.0 |
| Aug. 22 Cash | 6.12.4 |
| Aug. 29 Cash | 25.0.0 |
| Sept. 8 Cash | 5.0.0 |
| Sept. 8 Cash | 70.0.0 |
| | <u>126.12.4</u> |

Balance 126.12.4

Settled

Gloves

3 Yds. Muslin

Presents for Pollie and Mrs. Holland, Johnny and Fred Todd. Doll for Violet.
Some lace.

Yarn and Stockings

Shoes for baby

Stockings for baby

Page 1

Bottons Hotel
27 Euston Road Kings Cross
Crabtree
Pay Sarah 4.60 for dress
Bring tooth brush at Sarah
Bring hoods & linens in parcels in Mrs. Sutcliffes
Bring uttsery (?) at Mrs. Crabtree Jessie Jackson Taylor

Shawl
Blue Dress
Right Hand
Send Jimmy

Page 2

Mrs. An Edwards
29 Boys Lane
Scholes
Wigan

Tell Robt. that Ed will send him pass if he wants to come out.

Mrs. Emma Bussey
23 Wharf St. London
Carning Town

Barnet Crabtree Love Clough

Page 3

Wm. D. Ryder 34 W. 11th St.
St. Stephens House

Kingsley 25 W. 27th St.
Dentist

Mary Sutcliffe Accrington
57 Stantee St. Niece

Peggy Ashworth Goodshawfold
Sister-In-Law

Mary Hargreaves Manchester
Salford Sister-In-Law

Thos. Nuttall Nephew
Dixon Terrace Burnley

Page 5

R. A. in a/c with R. A.

July 2

| | | |
|-------------|----------------|-----------------|
| Bg. Cash OK | 11.12.0 | Bal. 188.4.4 |
| " Ck. | 30.0.0 | 61.12.0 |
| " " | 5.0.0 | <u>126.12.4</u> |
| " " | 15.0.0 | |
| | <u>61.12.0</u> | |

July 28

Bal. 126.12.4

| | | |
|--------------|-----------------|---------|
| Aug. 13 Cash | 20.0.0 | |
| Aug. 22 Cash | 6.12.4 | |
| Aug. 29 Cash | 25.0.0 | |
| Sept. 8 | 5.0.0 | |
| " | 70.0.0 | |
| | <u>126.12.4</u> | Settled |

Page 6

Hotel de Faubarg
Rue St. Honore

Inside Cover

| | | |
|-----------------|-------|-------|
| To Macclesfield | 9.30 | 10.45 |
| From " | 3.50 | 4.12 |
| | 5.05 | 7.10 |
| To H. Chapel | 10.10 | 11.30 |
| Leave | 4.47 | 5.47 |

Tram every 1/2 hour from Market St.

Jackson Taylor
St. James Terrace
Waterfoot
Nr. Manchester

Page 6

Mrs. Jos. Snead
16 Church Rd.
Wavertree
Liverpool

Mrs. W. Williams
113 West High Street
Cross Lane
Manchester

Mr. Riley
2 Claremont St.
North Shore Blackpool

Page 7

John o'Toms o' the Tops
Wm. Ashworth Saw him at Goodshawfold

Saw Mrs. Ashworth a sister of Jas. Haworth who knew
Mr. Nuttall very well.

Jamie of Butcher
Jamie Lord
Many a bit of mischief together.

No. of month born in
Double it
Add 5
Multiply by 50
Add age at last birthday
Subtract 365
Add 115

Age is last 2 figures

Page 1

My Address
Jackson Taylor
St. James Terrace
Waterfoot
Near Manchester

W. Headridge
253 Oxford Street

S. (?) Pierpont 14 St. Arm
Peter Head?
1 Lunefrove Oxford St.

Page 2

| | | |
|----------------|----------------------|-----------------|
| To Cash 300.00 | By Cash | 25.00 |
| | June 2nd " " | 10.00 |
| | June 13 by check | 28.00 |
| | June 13 by check | 25.00 |
| | June 27 by check | 5.00 |
| | June 28 by check | 14. 1.0 |
| | June 30 by check | 4.14.8 |
| | | <u>111.15.8</u> |
| | B. Bal. to July of - | 188 4.4 |
| | | <u>300 0.0</u> |

| | |
|---------|------------|
| Johnnie | s d |
| dr. | .4 |
| To Cash | .2 |
| | 1.0 |
| | .3 |
| | .4 |
| | .1 |
| | <u>2.2</u> |
| | 2.0 |
| | <u>4.2</u> |

Page 3

| | | |
|---------------------------|------------------|---------------------------|
| | Johmie 445 | |
| | <u>Minnie 42</u> | |
| | R. Dress | 1.25 |
| | Clothier | 6.25 |
| | | 2000.00 |
| Decimal Dollars and Cents | | 130.68 |
| | | 106.00 |
| | | 46.00 |
| P. | | <u>2290.18</u> |
| Deposit on fare | 50.00 | |
| Washing | 1.25 | |
| Fare to W. | 60.40 | |
| Sleeper | 4.50 | |
| Hotel Bill Wash. | 4.00 | Decimal Dollars and Cents |
| Breakfast | 2.00 | |
| Fare | 382.00 | |

Page 4

Gloves
3 Yards Muslin
Presents for Pollie & Mrs. Holland, Johnny and Fred Todd
Doll for Violet. Some lace.
Yarn and stockings.
Shoes for baby.
1 Cash China
2 Large Trunks
1 Tin Trunk Books
1 Tin Trunk For Use
1 Bundle Chairs
1 Bundle Flocks
1 Satchee
2 Trunks Esther

Ino. Hollin Bro.-In-Law-Stanley St.
Nr. Newchurch

Jas. Haworth
Plantation St. Accrington
Enoch Crabtree
Jno. Hollin Nephew

Page 4

| | |
|--------------|-----------|
| 1 Cigar Case | Holland |
| 1 Silver ? | " |
| 15 Blk. Silk | Mr. Small |
| 1 Spy Glass | Rossoth |
| 1 Meershaum | Allport |

Mr. Robt. Smith
201 Park Lane
Macclesfield

Dr. Chas. Kingsley
7 Rue Scribe
Paris

Dr. St. George Elliot
39 Upper Brook Lq.
London

Miss T. Pickup
Timber Hill Burnley

Page 5

Holborn Restaurant Near Inns of Court High Holborn
Criterion
Osgoods Complete Pocket Guide to Europe \$2.00
Check for collection cost \$2.50
Job Osborne
Doyleston
Canterbury
Christ Church
New Zealand
Eshell & Co.
12 St. Anne's Square
& 15 Market St. Dentist
Manchester

1883

May 1st started for N.Y. almost 12 noon, Tuesday. Got to Washington at 1:30 P.M. Went to St. James Hotel. Stayed all night and took the 8 A.M. train for New York. While in Washington, went round the Capitol Building. Saw the new fresco work in the dome. Saw the place where Garfield was shot in Baltimore & Potomac depot. The place is marked by a star on the floor where he fell and a marble slab on the wall.

Arrived in Jersey City at 3:40 P.M. Too tired to go to Newburgh that day, so stayed all night at Gaylors Hotel, Jersey City. Train missing connections. No one there to meet us, but saw Foster at Cortlandt St. Ferry soon after.

On Wednesday A.M. took the cars at Jersey City for the Pavonia. Jerry and Mrs. T. and the rest went to Newburgh. I went to Kingsleys thence to store, thence to Staten Island. Came back to Kingsleys again and then took the L. road to Chambers St. and took tickets on the Erie road to Newburgh at 4:45 P.M. Arrived in Newburgh at 7 P.M.

On Wednesday evening, day of arrival, went to the 5th Avenue Theater and saw Mrs. Langtry in "An Unequal Match".

On Friday, went to Washington's Headquarters and in the afternoon went to the mill.

On Saturday, May 12, sailed from New York on the Sardinian at 9:30 A.M. Several saw us off. On board were Emily Faithful and Kate Patterson and Theodore Tilton. On Sunday attended divine service on shipboard. Service read by Captain Dutton. The children were a little sick on Sunday. My wife started to be sick Saturday afternoon, but felt some better on the Sunday.

All Saturday had beautiful weather. On Sunday it was nice weather also except being a little foggy 312 miles. Monday 312 - fine. Tuesday - fine. Made 300 miles. Wednesday foggy, but sea calm. Made 270. Thursday fine, but foggy at intervals during the day. Made 280 miles.

Friday, warm, sea calm, but a little foggy, in forenoon (?) made 295 miles.

Saturday the 19th weather fine to warm, sea calm. Made 302 miles. Sunday 20th weather fine made 302 miles. Passed 2 steamers and 1 sailing vessel. Attended divine service.

Monday weather finer. Made 304 miles. Passed the Shelly Rocks at 4:30 P.M. They are named the Bull Cow & Calf. Passed Cape Clear at 7:00 P.M. Light enough for us to see the land plainly.

Tuesday 22nd fine passed St. Georges channel, saw Holyhead plainly, but it was mostly hazy all day. Made 96 miles.

Arrived in Liverpool at 10:00 P.M. it being a beautiful night. Waited until the customs officers examined my baggage. Found Mrs. Snead and my brother Ingham awaiting us. Went to the Compton Hotel and stayed all night. Very fine hotel.

Went around next day Wednesday the 23rd to St. George's Hall, Art Gallery, and the Museum and started for home on the half past 2 train in the afternoon. In the evening saw brother Willie, Mr. R. Ashworth, Jas. Hill and several others of our relatives. On the 24th Thursday went to my sisters in Cowpe to dinner.

Went on the hillside and had a very pretty view of the surrounding country. In the evening went to Holt Mill and saw the places where I played when a boy. Went around by the old house where we lived so long.

On Friday the 25th, went to Cowpe again and had a sitz bath to try and stop my bowel complaint. Also went to our Inghams to dinner at Height Side. Went to Holt in the afternoon, and afterwards to Cowpe again.

Next day Saturday went with Ingham and Rowdon to St. Annes on the Sea to stay over Sunday. Quite a new place and will take a few years before it looks settled. It had a very fine hotel and several brick residences. Also a pier and promenade.

On Sunday the 27th walked to Lytham, about 3 miles from St. Annes, which is a pretty place, rode back on train. Could see Southport and the Welsh Mountains in the distance. Weather very warm and very much like an American day on the 26th.

I also went to Blackpool to the Winter Garden and Skating Rink. On the 27th also went to see Mrs. Taylor. Mrs. Lomax and John Lomax were present. Mrs. Taylor rents a pretty house at St. Annes. She seems to fret a good deal about me.

On Monday the 28th had the first rain since our arrival in England (6 days). Rained for a short time in morning and then cleared up. Started for home at 1 P.M. passing through Preston, Wigan, Chorly, Bolton, etc. Stopped at Bury and saw J.H. Duckworth and Mrs. H. Downham. Arrived home at 5:30 P.M.

Tuesday 29th - Old Sapling Day. A little rain in the morning, but soon cleared up. Took the train for Rawtenstall and bus to Love Clough. Called on Peggy Ashworth, an Aunt of Mrs. Taylor's. Also saw Barnet Crabtree a brother of Rich S. and George Crabtree and also saw a sister of theirs, Mrs. Lord. Went through the Rossendale Print Works where they print Calicos. Saw the place where Mr. Nuttall lived - Cupola Clough, and the place where Crabtrees lived.

Wednesday 30th - Went to Manchester to Eshell & Co. dentists. Got measured for 2 suits. 1 for f3 and one for f3.15. Also went to Mary Alices. Saw May and Ernest. Also saw Ellen. Left Manchester at 6:30 P.M. getting to Newchurch at 7:30 P.M.

Thursday the 31st went to see Dr. Wilson, but he was not in. Went up the Heys and went in the National School which was being enlarged. Also stopped at Sarah Hills and at Hollin. Mrs. T. went to Manchester with sister Sarah.

Friday June 1st. Went to our Willy's to dinner and tea. Called at Sarah Hills'.

Saturday June 2nd went to Cowpe. Saw Birtwistle in regard to my health. In the afternoon went to Sarah Hills for dinner and tea. Also went to Bury and saw a poultry show which was very poor indeed. Got back in time for tea.

Sunday June 3. Went to Newchurch Church and in the afternoon went on the "Law", a high hill. Could see Crawshawbooth, Haslingden, Goodshaw, Helmshore, Waterfoot, Newchurch, Stacksteads and part of Bacup. Could also see Cupola Clough very plain where the Crabtrees came from and where Mr. Nuttall lived. A very beautiful day in fact have had nice weather all the time since we came.

Monday, June 4, went through Roughlee. Tea on the Tops to "Law". A magnificent morning although a little hazy. Writing this on the moor from whence I have a fine view of the surrounding country. Am sitting opposite Newchurch and Holt Holme. It seems shameful to me that more people do not visit the moors. Everybody is busy and cannot get away until Sunday when a few people may be seen on the moors but not as many as would be expected. In the afternoon went to Cowpe for dinner. Mother went with us. After dinner took a walk on the hillside and had another good view of the surrounding country from a different point.

Tuesday, June 5th. In the morning, went to Hollin. About 1 P.M. started for Manchester in the evening, went with Willie to see Muncaskeys celebrated picture of "Christ Before Pilot", also went to the Princes Theater and saw the comic opera of "Bluebeard".

Wednesday, June 6th. In the morning had our pictures taken in a group for which the artist charged 2/6 and 10^d each extra for 2 more. The children's picture was taken since and cost 7/6 per dozen. In the afternoon went to Belle Vue and saw Danson's picture of Tel el Keber which looked quite natural. Saw the animals and other sights. Mrs. T. went to the theater with Herbert and Mrs. Rothwell. The play was Bluebeard; same as I attended.

Thursday, June 7th. Went from Manchester to Macclesfield to see a cousin of Mrs. T. She was away at Blackpool, but we saw the husband and children. After dinner, we went through the Park and Cemetery. A very old town with beautiful surroundings. Bought 1 dozen handkerchiefs for 22^s dozen. On our way back passed through Stockport.

Friday, June 8th. Went to Heaton Chapel to Mrs. Lomax for the day. House full of oil paintings and bronzes. Also went to John A. Lomax's (a cousin) and bought 3 oil paintings viz 1 sea view f8.00, 1 on wood, 2 cows f2.10 and another sea view f2.10. Also bought 4 black and white pictures sketched by Uncle Lomax and some heads drawn by cousin John for which paid f15. He said the lot I had bought were well worth f50. The two cows were marked on the back of the picture f10.00. The oil paintings were also done by John A. While there, an artist called to see Johnny who had exhibited 3 pictures of dogs at the Royal Academy this season which had met with great success. The subjects were Expectation, Anticipation and Realization. Johnny did not exhibit this year although he has formerly done so at the Royal Academy.

Saturday, June 9th. In the morning went to Alexandria Park and to dinner to Edward Whipps. After dinner to a walk and went in the Botanical Gardens. Very nice, but nothing going on.

Sunday, June 10th. Morning went to the Cathedral and heard the services there. Alterations were going on so it did not look very nice inside. After service, went through Shyde Hill Market. Saw the new Town Hall opened by the Prince of Wales. After dinner, went walking with Ed Whipp and Willie in the country to Chorlton cum Hardy. Very pleasant walk. Saw an old country house where Oliver Cromwell lived. Saw Chorlton old church. Had tea at Ellens. In the evening, Mrs. T. went to St. Peters Church.

Monday, June 11th. In the morning went to town, looked over a bookstore or two. Also went to Dr. Ross' house on Oxford Street, but did not find him in. Bought Irelands Hogarth paying 30^s for same. Also a Livingstone paying 5^s. In the afternoon went to town again. Saw Dr. Ross in King St. Bought a scarf pin paying 31^s for same. In the evening went to Bell Vue and saw the fireworks. Took Willie, Herbert and Johnny.

Tuesday, June 12th. In the morning, went to Salford to see a cousin of Mrs. T. named Mrs. Williams. Afterwards, went and bought some books viz

| | | |
|------------|--------------------------|-----|
| Schuylers | Turkestan | 5-0 |
| Barnbys | Asia Minor | 5-0 |
| Vizableys | Berlin | 5-0 |
| Habers | South Africa | 4.6 |
| Stanleys | Dark Continent | 7.6 |
| Du Challin | Land of the Midnight Sun | 6.0 |

Bought these in Mudies Library. In the evening, started for Waterfoot arriving about 7:35 P.M.

Wednesday, June 13th. Went to Rawtenstall and saw father's grave. Also went around Hurst Farm where my father, grandfather and great-grandfather lived. Saw an old man and entered into conversation with him. Said he knew all our family. Used to play with Uncle George and worked for Uncle James. Said he remembered my great-grandfather. Went through Clough fold on my way home. Stopped at Ingham's for dinner. While in Rawtenstall went through the church. Saw the vault where grandfather, grandmother were buried, the former living until he was 81 and the latter until 79. Also saw in church the present made by Aunt Betty in memory of her daughter. It is marked by a tablet. In the afternoon, went through Richard Ashworth's felt mill. Saw some fine felts and could see that a great advancement had been made in the felt trade.

Thursday, June 14th. Went to Wigan and saw Jno. Edwards' mother. Also saw his brother Joe, who seems to have something the matter with his head at intervals. He wanted his brothers to send for him badly and begged me to tell them so. Got back at 4:30 P.M. and went to James Hills for tea. Had fine weather since our arrival up to now.

Friday, June 15th. Rain in the morning. Went to Accrington and called first at Enoch Crabtrees. Saw Emily and George Bradford. From there we went to James Haworths, a friend of Mr. Nuttalls. He seemed in very feeble health and is very old being 81 years old. Also went to John Hollins, a nephew of Mr. Nuttalls. Stayed there for tea. From there, we went to Mary Sutcliffs, a niece of Mr. Nuttalls. They seemed in very poor circumstances. Wet nearly all day.

Saturday, June 17th. Went to Newchurch Church in morning. Afternoon went to John Hollins who married Mr. Nuttall's sister. In the evening, went to St. James Church Waterfoot.

Tuesday, June 18th. In the morning, went to Hollin round by Boothfold and Edgeside. Had dinner at Willies and tea at Inghams.

Wednesday, June 19th. In morning, went to mothers. Had lunch there. In afternoon, went to Hollin. Also up to Whitewell Bottom. Went to the coal pit and saw a man who used to work with Mr. Nuttall at Hambleton. Went through R. Rawlinsons' and R. Shephards' mills. Went to Mrs. Turners. Had tea at Inghams; from there went to a sale at the Royal Hotel of J & T Pillings property.

Thursday, June 20th. Went to St. Johns Church Bacup to the consecration. Heard the Bishop of Manchester (Fraser) preach a sermon. Very fine church. Also went to see Aunt Alice on Hile and Mrs. Parkinson. From there went to Rochdale by Facit and Whitworth. Went with Ingham to buy a hard waste devil. Went in Rochdale old church. Saw Tim Bobbins grave, also saw house where Byron lived and saw the Town Hall. Went in the Park, and down Church Lane. Bought a suit for Johnny 14/6. Also 1 dozen collars @10d each, and 4 ties @1/6. Also 1 dozen socks @1/9. By an oversight, I omitted to include Monday, June 17th.

Went to Burnley to Mrs. Pickups, but found she had gone to London. Going to be married to her cousin. Went to Townley and was shown around the mines and coke ovens by Mr. Pickles, the manager. Saw Townley Park. The coal mines are

very extensive, everything being done by machinery viz screening, loading coke, etc. They make sewer pipes and bricks from the clay taken out of the mine (the bottom). The coke looks very much like our coke. The manager said they could always get 5^s more a ton than the Wigan men could get for theirs. They have some patent ovens holding 8 tons. They said after I told them what we drew from an oven that we made about the same percentage as they did.

Friday, June 22nd. Went to Manchester. Bought some jewellery. Brooch 3.17.6, Bracelets 2.15 and 3.7.6, Silver Bracelets 10.6, Guard and seal 1.76. Also bought an inkstand 17^s and dressing case 34^s. Went to Barton Arcade and bought some more books viz Salas, America Revisited 14^s, An Actor Abroad 2/6, Life of Cruikshank 5/-, Experiences of a Barrister 4/-, New Guinea 8/-, Old Paris 3/-, got back at 8 P.M.

Saturday, June 23rd. Went on the Tops in the morning. In the afternoon went to Bent gate near Haslingden to see a cricket match between Bacup and Haslingden. Went through Rawtenstall Fair. Saw Uncle George.

Sunday, June 24th. Stayed in the house all day having a bad cold.

Monday, June 25th. Went to Waterfoot in the morning. Heavy rain in afternoon. Stayed in house.

Tuesday, June 26th. In morning, wrote to Mr. Nuttall. Afternoon went to Kirk Fair and to our Inghams. My wife went to a cousin of hers at Water.

Wednesday, June 27th. Went to Rochdale. Wet day. Bought 1 tea service 40 pcs. and 1 breakfast service; paid for the 2 together f6-10-0. Also bought 12 dessert plates 18/-. One toilet service with slop jar fl.4.3. One toilet service fl.1.0, and 2 china vases fl -- Also bought an afternoon tea service for sister Sarah for fl.15.6, and 1 tea service 40 pcs. for Ingham fl.8.6. Bought some underclothing at Luptons.

Thursday, June 28th. Went to Waterfoot; thence to Stacksteads and saw Matthias. Went through Rake Head, and past Henry Heys Quarries over the Tops to Cowpe. In the evening went to Waterfoot. Again called at mothers, saw Mr. & Mrs. Fielding, also called at Jas. Hills.

Friday, June 29th. in morning walked through Waterfoot and Holt Mill up to the Hurdles and Lenches. Saw young Holt whose family have lived on the farm for the last 400 years. He showed me in the house, gave me a glass of milk and some pie. During the conversation, he told me that Robert Munn was born in the house we used to live in at Holt Mill and that he came to look at it before he died. Walked from Lenches around the Top past Roughlee to Cowpe. In the afternoon we all took a wagonette and drove to Portsmouth Yorkshire. Went through Rawtenstall and Crawshawbooth and Burnley and Holmes Chapel and Townley. A very pleasant drive. Scenery at Portsmouth a good deal like West Virginia scenery.

Saturday, June 30th. Had a good bath in morning. In the afternoon, went to New Hall Hey to Elizabeth's to tea. Saw a cousin of Mr. Nuttall named Mr. Holden.

Also saw Robert Butterworth, another cousin of mine. They used to take care of me when I was a baby. At night went on the bus to Dark Lane and walked up to Kirk Fair. A great many people were there. Saw Alice Stott and other people whom I knew.

Sunday, July 1st. Went to Newchurch Church morning and afternoon. Went to see Mr. Mayor whom I would not have recognized; he is so changed. Gave him a present. In the evening, Ingham and Jane had tea at Cowpe with us.

Monday, July 2nd. Wrote Carters in morning. In the afternoon went upon Cowpe Law, to Waughs Well with George Birtwistle and Rawdon and sister. Birtwistle showed us the place where a woman was once found dead, having lost herself in a snowstorm. He also showed us the place where 9 persons from London came to live during the plague and where they all died. In the evening, went to Waterfoot.

Tuesday, July 3rd. Went to Hollin both morning and afternoon. Had dinner at Inghams. In the evening, went to Kirk Fair.

Wednesday, July 4th. Started at 6:00 A.M. in a wagonette for Whalley, Ribchester, Stoneyhurst and Low Moor. Passed through Haslingden, Accrington, Clayton-Le-Moors, etc. Went through Whalley old church. Built in 1050. Very fine old oak carving. Also went in Ribchester old church. Had dinner at the White Bull. Ribchester is a very old town. From thence, went through Stonyhurst College. Very interesting. Saw an old Prayer Book that Mary, Queen of Scots had

when she was executed. A Jesuit who had been a missionary in Barbadoes showed us through. Thence we went to Low Moor and had tea at Mr. Waddingtons. Went through Clitheroe and saw the Castle. Arrived home about 11:30 P.M.

Thursday, July 5th. Went to Waterfoot and Hollins. Had dinner at our Wills.

Friday, July 6th. Went to Waterfoot.

Saturday, July 7th. Started for Manchester at 8:00 A.M. for Holland, Belgium and Germany. Stopped at Peterboro 2 hours and went in the grand cathedral built in the 11th century. Very fine carving outside, but it has been much defaced by the weather. Peterboro is a nice old town. Went on as far as Ely and had to wait there an hour and a half. Went around the old cathedral there, but could not get inside. This is also a grand cathedral, but the carving outside is not so elaborate as Peterboro. A large number of swallows were flying about the towers which are very high and the sight was picturesque. Ely is another old town, and the cathedral was built about the same time as Peterboro. While in Peterboro registered my name in the book at the cathedral and saw names from all parts of the world; Europe, Africa, America, Australia and New Zealand. Had tea at the Bell Inn at Ely and dinner at the Great Northern Hotel at Peterboro. Passed through New Market, Bury St. Edmunds and Ipswich. A very fine farming country. Saw hops growing. Got on board the steamer for Rotterdam at 9:45 P.M.

Sunday, July 8th. Did not sleep well and rose at 5 A.M. Went on deck. Out of sight of land, but could see a few sails. Arrived in Rotterdam about 9 A.M.

Stopped at Hotel St. Lucas. 150,000 inhabitants. Went to Boymans Museum and saw a number of old paintings. Saw statue of Erasmus. Walked around the city. Noticed that nearly everybody was smoking cigars. Went by rail at 1:00 P.M. afternoon to the Hague - distance 14 miles.

The Hague is a large city though not so large as Rotterdam. It is very clean and is altogether a nice town. Went to the "House in the Woods" or the Hague, where the Kings and Queens of Holland have resided. We were shown through some more beautiful rooms, the most beautiful of which was the Orange room, a room representing scenes in the life of Holland. The walls were a mass of paintings, painted on the walls. Paintings by Vandyke and Rubens and other famous painters. This room was the most beautiful room I have ever seen. Another room was called the Japanese room with tables, furniture, etc., presented by the Emperor of Japan. Another room was called the Chinese room. The rooms were all beautiful. I am much pleased with Holland so far. We walked through the town in the afternoon. Many of the shops were open. The people seem much like Germans. Saw the Houses of Parliament. Went in the Park through a fine forest of beech trees. In the evening went to the Zoological and Botanical Gardens. Very pretty grounds. Saw statues of Wm. I - and Princes of Orange. Retired at 9:30 P.M.

Monday, July 9th. Rose at 7 A.M. and went out for a short walk before breakfast. The hotel we stop at is Hotel de Europe. The City - Hague contains 102,000 inhabitants. It is the most fashionable and aristocratic town in Holland. Also the most handsome. After breakfast, went to the Binncoff, a celebrated picture

gallery. Pictures by Rubens, Vandyke and other masters. Also went in an old prison built in 1200. Shown through the cells. A great many instruments of torture were exhibited in this place. Also went to a Barons residence and saw his private gallery. Saw 1 picture by Missionier valued at f8,000. Also pictures by Rubens, Teniers, Kernet, etc. Went in the marketplace, also in the Royal Bazaar. In the Baron's residence were some beautiful tables, etc., with imitations of fruit in precious stone.

Tuesday, July 10th. Started for Amsterdam about 10 A.M. It is about an hour and half ride from the Hague to Amsterdam. When I reached Amsterdam, felt unwell and stayed in all the day, with exception of a short walk. Stopped at Hotel Suisse.

Wednesday, July 11th. Went to the Exhibition. Also went to the Museum in the Grippenhuus. Saw old paintings by Vandyke, Rembrandt, Potter, etc. Also went to the Kings Palace and up in the Tower where a good view of the city was seen. In the distance was Haarlein Saardam and the Zuyder Zee. Left Amsterdam at 4 P.M. for Cologne. Passed through Dusseldorf, Mulheim, Oberhausen, etc. It took us 7 hours to get to Cologne. Went to Hotel Dorn opposite the grand Cathedral.

Thursday, July 12th. Started for Cologne up the Rhine for Bribeck at 9 A.M. A great many Americans on board. Passed Bonn at 11 A.M. A good view of the Seven Mountains is to be had from here. Bonn is a very fine place as seen from the Rhine. Stopped to take on passengers. Passed the Drackenfels at 11:30. A very fine ruin on the summit of the crag. Passed Appolmaris at 12:15. This is where the famous water comes from. Reached Coblentz at 3 P.M. Saw the

Fort Eshenbreitien on the opposite shore. Also where the Moselle empties into the Rhine. The fort is very fine and would seem impregnable. Coblenz seems a clean town. Most of the hotels are painted white or yellow or slate color. Passed castle Stotzenfells at 3:30 P.M.

Prince Albert and the Queen visited this castle in 1845. Saw Johannisberg where Prince Metternich resides, and where the best wine is made. Also saw Rudesheim Berg where an excellent wine is made. Arrived at Bribeck about 9:30 P.M. Took carriage that night to Wiesbaden which is only 1/2 hour ride from Bribeck. In the evening went in the Kursaal & Gardens. The fireworks were just over. The grounds look very pretty. The fountains have gas jets under them, look very nice in the evening. There was dancing going on in the Kursalle. Stopped at the Hotel Four Seasons.

Friday, July 13th. In the morning, went to the springs and had a glass of the famous water. Water was very warm, but not unpleasant to take. This was at 7:30 A.M. and a stream of people were coming and going with cups and glasses in their hands to drink the water before breakfast. The band was playing. At 9:15 A.M. took the boat again back to Cologne. As before, a great many Americans and English aboard. Saw the Mouse Tower which stands in the Rhine and where; according to legend, Bishop Hatto was eaten up by mice for storing up the corn and refusing to sell it to the starving people except at a big price. Also saw the place where Blucher crossed the Rhine when he went to join Wellington. Arrived at Cologne at 4 P.M. Went in the Cathedral again. In the evening, walked around the town.

Saturday, July 14th. In the morning at 7:15 went to the Church of St. Ursula where the bones of the 11,000 virgins are enshrined. The bones are in the Golden Room hanging on the walls. The skulls are in cabinets. A number of relics are also shown in this room, one being one of the jars that held wine made by Christ at Cana of Gallilee. Also saw thorns from the crown worn at the crucifixion. Left Cologne at 9:15 A.M. for Brussels. Reached Aix la Chapelle at 10:30 A.M. Passed Verviers at 11:30 A.M. and Liege at 12 A.M. Liege is a great iron manufacturing place. Passed Louraine at 1:30. Arrived in Brussels at 2 P.M. In the afternoon walked around the streets to the Hotel de Ville and square where the ball was held before the Battle of Waterloo. Also saw the Mannekin Fountain one of the sights of Brussels. In the evening went to Mirsewn du Nord. Saw Chang the Chinese giant and Salma Bros.

Sunday, July 15th. In the morning walked in the Park, etc., and looked in the Cathedral St. where service was being held. Some magnificent stained glass windows in the cathedral. Also a fine pulpit. At 11 A.M. went to the English Church. The church was full of people - English and Americans. In the afternoon went to the Museum al Peinture, a famous picture gallery. Saw a number of Rubens paintings, also several Teniers. Saw 2 paintings of animals by Eugene Verboeckhoven which I thought very good. Saw the New Palace of Justice which is a very handsome building. Also took a drive around Bois de la Cambre the pleasantest promenade in the environs of Brussels.

Monday, July 16th. In the morning went on the train to the field of Waterloo, distance 10 miles from Brussels. Went up on top of the Lion Monument 200 ft.

high, an immense mound raised on the field and surmounted by a bronze lion, made from French guns. A guide who was born on the field showed us all around. We went to the Chateau Hugomont which the English held against the repeated attacks of the French. Went inside the Chateau and saw the well where the bodies of 300 men were thrown in and the well covered up. Saw the portholes, etc., made in garden walls. Also went in the chapel where many took refuge when the chateau took fire, and saw the place where the fire stopped after firing the foot of a crucifix at the entrance to the chapel. The soldiers ascribed the stoppage of the fire to miraculous intervention. Saw the monuments erected to Col. Gordon and the other to the German soldiers. Saw the farm of a La Haye Sainte and the inn La Belle Alliance where Blucher and Wellington met after the battle. In the afternoon went to the cathedral of St. Gudule and looked at the stained glass windows dating back for 400 years. Also went in a lace factory and saw them making lace. Bought a scarf paying fl. In the evening went to the Eden Theatre. Stayed at the hotel de l'Epereon.

Tuesday, July 17th. Started for Antwerp on the 8 A.M. Express. Passed Mecklin on Malines where the celebrated lace is made. Arrived in Antwerp at 9 A.M. Went to the Hotel des Flandres near to the Cathedral. Walked through the Cathedral. Saw some splendid monuments. Afterwards went to the museum which has a splendid collection of paintings by the old masters, Rubens being the most prominent. There were others by Van Dyke, Teniers, Titian, etc. Saw Rubens chair. Also the house in which he formerly lived. Went to the Museum Plastin Moretus established in the house of the celebrated printer Chris Plantin who commenced printing in 1555. Saw a great many engravings. Also the plates,

dies, printing presses, etc., as they were when they left off printing in 1800. Saw several portraits of the family painted by Rubens and Van Dyke. It was a very interesting place. From there went in the Cathedral again, having to pay 1 franc when we saw Rubens celebrated "Descent from the Cross" and "The Elevation of the Cross" from which numerous pictures and engravings have been copied. In fact, one painter was painting a copy when we were in the Cathedral. In the museum where we went this morning, I saw one painter painting a copy who had no arms. He painted with the toes of his foot. The other foot held his pallet. Several other painters were making copies of the pictures. We also saw in the Cathedral "The Assumption" by Rubens another of his celebrated pictures. There were a great many splendid marble altar pieces. Also some splendid carving in oak, and some fine stained glass windows. Heard Antwerps celebrated chimes. The Tower is very high being 405 feet high. Went in the Street Canal au Sucre where a massacre of the Flemish citizines by the Spanish took place. Saw the Hotel de Ville and the square where the execution used to take place. Saw an iron covering over an old well which was made by Quentin Mastys who was originally a blacksmith of Louvain, but afterwards became a celebrated painter. Left Antwerp at 4:30 P.M. Antwerp seems an enterprising town and they are building new docks and putting up lots of new houses. Passed down the River Scheldt. Passed Flushing at 9:15 P.M. Rather a rough passage. Was sick in the night. Arrived in London at 11 A.M. Met Rawdon who was waiting for me and went with him to Taylor's Bolton Hotel. Euston Road near the station and also near St. Pancras Station and hotel, a very fine hotel.

Wednesday, July 18th. Went in the National Gallery and Westminster Abbey. Walked through Fleet Street, Strand, etc. Saw the principal newspaper offices, Trafalgar Square, Holywell Street, where old books are sold. In the evening went to the Gaiety Theatre where "Paul and Virginia" was being acted.

Thursday, July 19th. In the morning went to Whitehall to see the Horse Guards. Walked in St. James Park and the Mall and saw Buckingham Palace, etc. Went in Westminster Abbey again. Also went to Madam Tussauds Exhibition. Went in the Criterion Restaurant said to be the finest in the world. Also went to Wellington Barracks and saw different regiments drilling. Also went to Hyde Park Corner and Rotten Row where we saw a great many carriages pass. Went to the Haymarket Theatre in the evening, play "Fedora".

Friday, July 20. In the morning went to the Tower, and to London Bridge, also saw the London Monument. Had dinner at the Falstaff in Eastcheap a fine place like the Criterion. In the afternoon, went to St. Pauls Cathedral. Went in the whispering gallery, saw the bells and clock work. Went above the dome and could look through a little hole down in the bottom of the Cathedral where the people were. Did not go in the hall as he was closing up for service. Went to the Lyceum to get tickets, but found standing room only and did not go in.

Saturday, July 21st. Went to the Houses of Parliament. The House of Lords was very fine inside. Also went in the Commons, etc. From there went to the Lyceum Theatre and saw Henry Irving as Shylock in the Merchant of Venice and Miss Ellen Terry as Portia. Scenery was grand. Afterwards went to the Fisheries Exhibition. Also saw Albert Memorial in Hyde Park and Albert Hall.

Sunday, July 22nd. Went to Spurgeons Church. Spurgeon was not preaching, but heard his son who is as good a preacher. Afterwards went to Mr. Ashworths, a cousin of Rawdons and had tea. After tea went to Stamford Hill and Stoke Newington. Could see Epping Forest in the distance. Passing through the city saw the Bank of England and Mansion House.

Monday, July 23rd. Went to the Crystal Palace for the day. Nothing in particular going on.

Tuesday, July 24th. Went down the Thames from Waterloo Bridge for Hampton Court. Stopped at Chelsea and went to Cheyne Row where we saw the house that Thomas Carlyle in for 48 years. A placard was in the window saying "This house for sale, formerly occupied by the late Thomas Carlyle for 48 years". Also saw his statue on the Chelsea Embankment. On the way down, saw Millbank Penitentiary and Lambeth Palace. We also stopped at Kew Gardens which are very pretty indeed. From Kew, we walked to Richmond, where an old palace formerly occupied by Henry VIII and Elizabeth stood. Elizabeth died at this place. Saw Richmond Green, a very picturesque spot. I suppose Richmond in Virginia must be named after this place. From Richmond, we booked to Teddington when we took a cab to Mr. Hoyles, a friend of Rawdons. We passed through Bushley Park through a celebrated avenue of horse chestnuts planted by William III and which in Spring make a beautiful sight being all in blossom. We then went through Hampton Court which was presented to Cardinal Wolsey by Henry VIII. It was very interesting inside and contains a great many old pictures and furniture. After tea Mr. Hoyle took us for a boat ride in his boat which took the first prize at the Sportsman's Exhibition. We went 3 miles up the River Thames to Sunbury. We passed the Lord Mayor of London's

residence and the house Garrick the actor lived in when he retired from the stage. The scenery on the Thames here is very pretty. We went home by train passing through Wimbledon, Clapham Junction and Vauxhall and and and Strawberry Hill.

Wednesday, July 25. In the morning we went to the National Gallery again. Stayed about 2 hours. Afterwards went to the British Museum where we saw a number of interesting objects. Saw the original articles of Magna Charta and many other interesting sights. In the evening Mr. & Mrs. Ashworth had tea with us after which we went to the Vaudeville Theatre in the Strand, where we saw the comedy "Confusion" played. Also "An Old Master".

Thursday, July 26. Went to Brighton 51 miles from London and the largest watering place in the world I suppose. It contains 128,000 people. It is a pretty place and has a pebbly beach. Took a drive around the promenade and through the town. Saw the old parish church built in the 13th century. Also saw the Pavilion Palace built by the Prince of Wales afterwards George IVth who resided here sometimes. Since 1850 it has not been used as a royal residence. Drove to Hove. Has a warm bath at the Brighton Baths in West St. Left Brighton at 6:20 P.M. and arrived in London at 9:20, train being about an hour late.

Friday, July 27. Went to Long Lane to see the Russells. Found they had moved away. Made inquiries and learned that Mr. & Mrs. Russell were dead. Got Tom Russells address and saw him where he worked in Farrington Road. In the afternoon went to Canning Town to see Mr. & Mrs. Bersey. Found them well. Saw the East India Docks.

Saturday, July 28th. Went to Holywell St. and in the New Courts of Law Buildings. Went in the Chancery Court and saw Vice Chancellor Bacon on the bench. Stayed about half an hour. From there went to South Kensington Museum and the India Museum. Saw the presents the Prince of Wales rec'd when he went to India in 1875. Drove in Regents Park and afterwards sat in the Park in Rotton Row. Afterwards had tea and went to Moore Burjess Minstrells.

Sunday, July 29. Went to Spurgeons. Heard Spurgeon's son preach again. Mr. Spurgeon being to unwell to preach afterward. Went to Bunhill Bielts Cemetary and saw where John Bunyan, Issac Watts, D.D. and Daniel de Foe were buried. Also saw Sushannah Wesleys grave. She was the mother of John & Charles Wesley. Also saw the graves of Oliver Cromwells grandson. Opposite Bunhill Fields is the chapel where Jno. Wesley preached. Saw the house he lived and died in. Also saw his grave. Adam Clarks vault is close by John Wesleys. Went to the Thames Embankment and saw the Egyptian obelisk. Went to Westminster Abbey and heard part of the sermon in the afternoon. In the evening went to the Abbey again and had a seat close to the pulpit. The Abbey was thronged with people. It was the last service in the evening until further notice.

Monday, July 30. Went to Windson Castle passing through Slough, Harwell, etc. Went through the State apartments and the Albert Church. Also went in St. George's Chapel. Saw the Queen's Pew and the stalls where the Knights of the Garter sit. They have their coats of arms nailed to the backs of the seats in brass. Also their swords above. Saw the Prince Imperial Monument and where Henry VIII, etc.

are buried. Went on Top of the Round Tower, and had an extensive view of the surrounding country. Could see Frogmore where Prince Albert is interred. Also Dalchet which is the scene of Falstaffs ducking and where Hornes Oak mentioned in Shakespeare used to stand before it was struck by lightning, a few years ago. The Queen planted a young oak tree in its place. Could also see the plain of Runnymede where King Joyn signed the Magna Charta. Could also see the Crystal Palace and where Lady Florence Dixie was said to have been attached. Went to Eton College, in the cloisters and quadrangles. Saw a great many names carved in the wainscoting and on the walls. Saw the boys in school at their studies. It is a very old and celebrated school founded by Henry VI in 1441.

Tuesday, July 31. Started for Newchurch on the London and North Western R.W.L. Passed through Hanon, Northhampton and Rugby. Had to change at Rugby and to wait 20 minutes and thence took another line to Leamington, where we stayed 2 hours. Walked around the town, drank the water, which has a salty taste and afterward had dinner. Then took the train for Stratford on Avon. Went to Shakespeares house and through the different rooms. Saw the room in which he was born and which has still got the same floor. Sat in the chimney corner which is in the same state as it was in Shakespeares time and where he used to sit. Saw Walter Scotts signature on the window which he wrote with a diamond. The window and rooms are full of names written by people visiting the house. Saw a good painting of Shakespeare in one of the rooms and for which the owner had been offered £2,000 but he refused to take and left it to be placed in Shakespeares house. Saw the grammar school where Shakespeare was educated.

Could hear the children at their lessons. Also saw the foundations of the house where Shakespeare lived after he came back from London. The foundations are covered with screens. Saw the old well in the garden. The wall enclosing the well is covered with ivy and is very pretty. Went to Stratford Old Church and saw where Shakespeare was buried. Also saw his monument just above, and the graves of his sisters and relatives. (The Hall Family) Was pointed out an old tree said to be the oldest tree around Stratford. Left Stratford at 3:00 P.M. Fare from Euston Rd. to Stratford 8.9 each and from Stratford to Manchester 9.1 each. Passed through Nantwich, Birmingham, East Bromwich, Wednesbury, Bilston, etc. Arrived in Manchester at 8:40 P.M. and had to wait until 9:45 for a train to Newchurch.

Wednesday, Aug. 1st. Went to Rawtenstall and to the Cemetary and around Hurst.

Thursday, Aug. 2nd. Went to Hollin around by Seat Naze. Also went to Waterfoot.

Friday, Aug. 3. Went around by Cloughfold to Chapel Hill and also sent to the Cemetary and Holmefield. In the afternoon went to Hollin.

Saturday, Aug. 4. Went on Cribden and could see the sea from the summit.

Sunday, Aug. 5th. Went to Waterfoot to meet Edward's brothers from Wigan.

Monday, Aug. 6. Went to Hollin and to Waterfoot and Cowpe.

Tuesday, Aug. 7th. Went to Fearn's & Waterfoot.

Wednesday, Aug. 8. Very wet. Did not go out.

Thursday, Aug. 9th. Went to Bacup and to Hollin.

Friday, Aug. 10. Wet again.

Saturday, Aug. 11. Went to Bacup and saw a cricket match between Bacup and Todmorden. The former won.

Sunday, Aug. 12. Went to church, morning and afternoon. In the afternoon Ernest was christened together with four others.

Monday Aug. 13. Went To Rawtenstall. Bought a pair of shoes paying 8/10. In the afternoon went to Bacup.

Tuesday, Aug. 14. Went to Britannia (part of Bacup).

Wednesday, Aug. 15. Went to Hollin.

Thursday, went to Accrington and to E. Crabtrees. JNO Hollins & Jas. Haworths. walked to Haslingdon.

Friday, Aug. 16. Went to Hollin and to Crowpe for dinner.

Saturday, Aug. 17. In the morning went to Hollin and came back over the Tops. In the afternoon went to Manchester. Booked to Bury and took the tram cars from there to Manchester. Saw Mrs. Langtry as Rosalind in "As You Like It".

Sunday, Aug. 18. Went to Church morning and afternoon. Many there on account of sermon referring to John Barcroft. In the evening went to Chapel Hill. Went in the burial ground of the Friends. Where they buried them from 1665 to about 25 years ago. A man who was born on the farm named Woodcock said that there were about 400 buried there. It is a very nice quiet place. The man said he would like to buy it he was so attached to it. He said there was about 40 acres in the farm and that it was sold last for fl,900. It formerly belonged to Joseph Whitehead who paid fl,600 for it.

Monday, Aug. 19. Went to Waterfoot and to Hollins. Also went on Tops.

Tuesday, Aug. 20. Went with A. Crowther on a walk to Todmorden Yorkshire passing through Sharney ford and Dulesgate. Stopped at Rochdale on our way back.

Wednesday, Aug. 21. Went to Crowpe and had a bath. In the afternoon went to Mr. Walkers to tea.

Thursday, Aug. 23. Went to our Willies to dinner. After dinner went on the Hile and had a game of cricket. Afterwards went to tea to Amys. Also went to Joe Stansfields.

Friday, August 24. Went to Manchester.

Saturday, August 25th. Went on Seat Naze and took part in a game of cricket. Married men against single. Single men beat. Afterward each side picked their own men and our side won.

Sunday, August 26th. Went to Church, Newchurch, morning and afternoon. After tea walked over the Tops to Love Clough on the moor got talking with a man who was going the same way. He said his name was Dick of Jennys or Richard Nuttall if you please. He said he was a cousin of Jno. Nuttalls. He showed us the farm where his father and himself had lived for 55 years. Came out at Durnockshaw, walked down to Holt Arms or "glory" and waited about 20 minutes for the bus to Rawtenstall.

Monday, August 27th. Went to Waterfoot and to Hollin.

Tuesday, August 28th. Went to Gisburn with Jas. Hill and mother and Sarah and Mr. Fielding. Passed through Burnley, Brierfield, Nelson, Barrowford, Sawley, Clitheroe, Clayton le Moors, Enfield, Chatburn, Accrington and Haslingden. Started at 8 A.M. and got back at 9:30. Passed a very pleasant day.

Wednesday, August 29th. Went to Hollin in the morning and afterwards to Cowpe for dinner. In the afternoon walked to "Top of Lench" and also to the Moorcock

Inn on Rooley Moor. Walked farther on and could see Heywood, Rochdale, Spotland, Whitworth, Bacup, Greenbooth.

Thursday, August 30th. Went to Manchester. Bought a dressing case for 15/-. Also a weather glass for 45/-, pipe for 10/- and cigar holder 8/6. In the evening walked to Rawtenstall to meet Mrs. T. who had been to Goodshawfold and Love Clough.

Friday, August 31st. Went to Pike Law Workhouse with Jas. Hill. In the afternoon had tea with him at Mytholme.

Saturday, September 1st. Went to Bolton Woods with a party. Got off at Skipton Yorkshire and from thence drove in a wagonette to the Abbey and Woods. Went in the Abbey and Church. Took a walk of about 2 miles to the Strid. Jumped over and jumped 1/2 way back again, but found that it was not quite safe on account of a jutting rock so jumped back again. Saw a monument erected to Lord Fred K. Cavendish whose father the Duke of Devonshire owns the estates. The Marquis of Hartington was staying there when we were there. Also went in Skipton Castle 800 years old. At 7:30 went to the station and booked to Hellifield to pay a visit to R. Hudson and his wife. Arrived there a little after eight.

Sunday, September 2nd. Wet in the morning and stayed in. In the afternoon had a pleasant walk around Hellifield

Monday, September 3rd. Rain again. Went to the engine house and saw Hudson at work. Left for Newchurch in the afternoon. Passed through Whalley, Gisburn, Clitheroe, etc.

Tuesday, September 4th. Went to Hollin in morning and in the afternoon to Hardsough on Irwell Vale to see a great aunt of mine, a sister of my grandmother.

Wednesday, September 5th. Went to Manchester to Ellens and Mary Alices. Bought several articles viz umbrella 3/11, silk dress 14 yards, 5.5.0 for Mrs. Small, Silver Brooch and earrings 16/-, Bracelets, Gloves 30/- dozen, Purses 4/17-. Went to Salford to see Mr. Williams but found him away.

Thursday, September 6th. Started for home from Manchester.

Friday, September 7th. Went to Bury to see J. H. Duckworth. Had a bath in Bury Baths. Went to the Trevelyan Club in the evening.

Saturday, September 8th. Went Waterfoot. In the afternoon went to the football match at Dark Lane. Several came to see us.

Sunday, September 9th. Went to Church in morning. In the afternoon went to John Hollins to tea.

Monday, September 10th. Went to Cowpe and had dinner together with Ingham and Willie.

Tuesday, September 11th. Went to Waterfoot in morning and in the afternoon to Rawtenstall. Several came to tea in the evening.

Wednesday, September 12th. Went to Jas. Hills to dinner.

Thursday, September 13th. Left Newchurch on the 11 A.M. train for Liverpool. Had to stay in Bolton an hour. Got to Liverpool between 1 and 2 P.M. Started from landing stage at 4 P.M. Very fine day and warm. Rawdon, Ingham and Willie with their wives saw us off. Saw Mr. Snead in Liverpool. Have 150 saloon passengers on board.

Thursday, September 14th. Fine day. Passed Bally -- cotton lighthouse at 10:30 A.M. Went ashore 4 hours.

Friday, September 15th. Fine again. Made 272 miles.

Saturday, September 16th. Fine. Made 342 miles.

Sunday, September 17th. Rather rough and raining with ship rolling very much. Made 350 miles.

Monday, September 18th. Fine in morning, but wet in afternoon.

Tuesday, September 19th. Nice weather. Made 343 miles.

Wednesday, September 20th. Rather wet. Made 350 miles.

Thursday, September 19th. Fine. Made 343 miles.

Friday, September 20th. Fine. Made 356 miles. Pilot came.

Saturday, September 21st. Saw land about 11 A.M. Fine, clear weather.

Reached the Narrows at 8 P.M. and had to stay on board all night.

Sunday, September 22nd. Reached the dock at 8 P.M. Went to Staten Island after our trunks had been examined.

LIFE OF A NINE YEAR OLD BOY IN 1924 IN LEWISBURG, W.VA.

WRITTEN BY WILLIAM D. TAYLOR IN 1934 - AGED 19

Sometimes I wish I weren't going to be 19 next birth day, but only once.

It sure didn't seem long ago that I was riding around on Patay with never a care in the world, never worrying about anything, getting plenty of sleep, good marks and having me grand time. What the four of us didn't do isn't worth mentioning. The four consisting of Harry Van Sicker, Cameron Coffman, Bud and I. One of our great crazes was turtles. We had all varieties in great quantities. Two snappers, one weighing about 5 pounds and the other an ounce if it weighed that, + skillets which were the pride and joy of our collection, and 15 terrapins. They were all kept in our back yard and after they had stayed around for about 2 months, the smell got too much for the family and they put a stop to that. We tried to start a frog farm then to make money by selling them to eat, but the frogs wouldn't grow fast enough for us to realize a profit. Then we had crawfishes for no good reason at all, except they were great sport trying to catch. We bagged 135 in one afternoon.

Then on the side we collected butterflies, bird nests, and insulators from electric lines, and most fun of all was building secret huts. No one could ever find them. One was under a saw mill with a passage leading to it that required utmost concentration in navigating. Another was in a barn behind a long hay. That was the slickest of all and no one discovered that one for ages. Another and our last one was a jeans box hidden under a bunch of loose hay in another hay mow.

In the spring our pasture was picking cherries. We would stay out days at a time stripping trees an end, and charging mid-winter prices for them. In the fall it was pig nuts, hickory nuts, butter nuts and walnuts. Many the afternoon I spent after school wandering over the woods with a bag in my hand picking only the choicest and biggest nuts. But my labors did not go unrewarded. After a good supper I was ready for bed and sleep that I am having now, then in the winter, whole afternoons were spent around the fire cracking and eating nuts, and the special treat were the fruit cakes that were made with them, and the cherry pies that go so well in the middle of the winter.

When there was nothing else to do we would

play in the drawing of the flour mill, but that was always accompanied by a severe scolding unless very great precautions were taken. The precautions consisted of going to the barn, stripping, and very carefully shaking each piece of clothing absolutely free of all woody material, for if so much as one piece dropped on the floor when you were undressing for bed that night the next day was a long one.

Some afternoons were spent at a farm about a mile or so down the road. There were two boys our Buck's age and one girl and they were the Dempsey. They lived up to the name. This was forbidden fruit, too, because we always got into some sort of trouble. One afternoon we had the ~~most~~ most delicious water fight I have ever indulged in.

It all started so innocently and ended so painfully. We were all soaking wet and were late for supper. The next morning was spent weeding the garden.

And so life went, so easy and painless, and so blissfully happy. | So run my thoughts on having arrived at the age of 19.

"Happy Childhood Memories"

When I was a little girl in West Virginia our summers were always spent up on the mountain away from the heat of the New River Canyon.

We had a farm which was called "Holme Farm" from our ancestral home in ^{Lancashire} Lancashire, England.

We had a picturesque log house to which was added more rooms all whitewashed. There was a trumpet vine climbing up the chimney. Also there was a garden and there was a log servants' cottage in the garden. Then came the barnyard and the adjoining house for the farmer. We were all so fond of him and, as a special treat he would let me ride one of the horses, when he brought them in from work, down to the watering trough, before putting them in the barn.

One day I slid into the watering trough as the horse was drinking. It was quite a surprise, but I was not hurt! I just had a good "ducking"!

We had a great deal of company all summer. My uncles and aunts would bring their friends from college and there were many rides and picnics planned for them.

Sunday was a big day. The whole family went to church in a quaint little country church about three miles away. We had a big carriage pulled by two horses and most of the men rode horseback.

2
After the service we would have a
get together with all the country people who
came to the church, then back home and a
big Sunday dinner.

Then my nurse, Diggie, would take me up
to my room for a nap.

When I woke up, we would go into the garden
and pick a bouquet of the most beautiful
flowers that we had and then Diggie and I
would be driven to the family cemetery where
we would put the flowers on my mother's
grave. It was a beautiful and peaceful
spot on the top of the mountain looking
down at the canyon. My visits there were
a happy memory!

Martha Taylor

My West Virginia Heritage

My Great Grandfather John Nuttall worked in the coal mines of Lancashire, England. He decided to come to the United States, landed in Staten Island, New York, and went to Philipsburg, Pennsylvania to open new coal land there. He started three mines and had three children; my grandmother Martha Nuttall was among them.

Great Grandfather Nuttall became dissatisfied with the mines in Philipsburg and then went to West Virginia to look at coal land there. He was extremely pleased with what he found and bought an enormous tract of land. Gradually new mines were opened from which came bituminous coal of a good quality.

My Great Grandfather was a very busy man who traveled all over his large tract of land establishing many mines. At his own expense he had a spur or piece of railroad built to travel up the mountain to go to the most productive mines.

His first mine built was in the New River Canyon where the New River flows. It is the second oldest river in the world; some people believe it is even older

than the Nile River in Egypt.

The ^{mine} itself was on a hill and to get there one must go up a steep incline. Oh, it's a scary trip alright! Small cars take you up to the driftmouth or opening of the mine. I never was allowed into the mine because miners have an old superstition that it is bad luck for a woman to enter a mine.

The mine was located at the Nuttall stop on the Chesapeake/Ohio Railroad system. The railroad has tracks on one side of the New River that go to Charleston and Huntington Virginia. On the other side they go all the way to Washington D.C. and New York. Along this railroad track were located coke ovens. They didn't add to invigorating the air when the wind was blowing a certain direction!

It was at the Nuttall stop on the railroad where my great grandfather built a home for his family, a store, and a small church. Gradually a town was established. The community of Nuttall consisted of our house and the store which adjoined it, many miners homes, a resident

doctor, and the little church. I was the first child to be christened in that church.

My grandmother Martha had married Jackson Taylor also from England. The couple established a home in the town of Nuttall and built a large house to accommodate their nine children, two of which died. Grandfather Taylor managed the store that was built and became bookkeeper of the first mine.

My great uncle William also built a house in Nuttall on the hill which was very beautiful. He had a fine library, a pretty flower garden and a conservatory; he was able to enjoy a nice life.

The New River as B. said is one of the oldest rivers. It has a great deal of white water. Just recently white water raft trips have been started. My cousins look forward to these trips every time they visit West Virginia. The New River is a treacherous but lovely river. One of our engineers was out in a boat reading a letter one day. He was unaware of the approaching rapids and was drowned. For this reason the Indians

Called the New River the River of death
and it lived up to its reputation.

M. Jay 10/

My Uncle had just retired. He wanted to take some time to get himself together as the retirement process was upsetting. He decided on a 3-month vacation out West and we were invited to go along. My Aunt, Uncle, their 2 sons aged 15 and 10, and myself went along. We enjoyed this journey thoroughly.

We took a little trailer with us and camped sometimes. If it was very hot and ^{then} we were tired we would go to a motel. It varied - I liked the times when we cooked and had the camp.

We started our vacation from Washington with our little trailer and went first to Winston, Salem. It is a very interesting historic town. We spent the night there with friends who entertained us beautifully. We were able to see the large Vanderbilt house during our brief visit.

The next day we went down through the Great Smokies; such beautiful, fascinating country! The bears were out on the side of the road. People were not always careful so signs were put up telling them to keep car windows rolled up so

that it was safe when bears jumped up.

We spent the night in Gatlinburg, Tennessee - a very touristed town with wonderful ski lifts to go up the mountain. I was disappointed as it was spoiled by all the honky tonk houses on the main street.

Then we went on down to Memphis, Tennessee; oh it was hot! We decided on an air-conditioned cabin there.

Next we went across the Mississippi River and then went through the Ozark mountains which are most interesting and quite primitive. We went along to Tulsa, Oklahoma where our friends who live there entertained us. I never was so hot as I was in Tulsa! There was no air-conditioning. We went to bed and later wake up in a pool of perspiration. Our friends had a big fried chicken dinner for us when we got there and just treated us royally. We did some sightseeing in Tulsa - a pretty, wealthy town.

We went on through Amarillo, Texas - hot there too!

Next stop was Santa Fe - one of the most interesting cities I've ever been in - very picturesque. We went out to the country and had a Mexican meal which I shall never forget. One could see the plains stretching out ^{from} where we sat.

From Santa Fe we went to Gallup - an Indian trading post with many native Indians. We visited Bruce Canyon and Zion from there.

We continued our journey in Colorado. I had lived in Florence, Colorado with my uncle for a while and we wanted to see our relatives there.

Florence was near Pikes Peak and Colorado Springs. We looked at our old homes there and stayed at a motel in Canyon City; then we went over the Royal Gorge - a scenic trip. We saw beautiful forest areas with aspen trees growing all over.

Colorado is one of my most favorite states. In the meantime we had seen many awful trouble with the car on the mountain roads. We finally had to take a great deal of water with us the whole way; if we didn't, the

thing would roll over!

We went to Southern Colorado to Cooney where the Box Canyon is located. Much gold was found there - a most picturesque old place. Beautiful meadows were filled with lovely flowers - great big Delphinium, Lupine, and brilliant western flowers too. It looked like a landscape washed in color.

We traveled to Mesa Verde Park - an Indian reservation. We stayed at a camp where every night rangers gave lectures about the place and then we looked around.

Next we went to Taos, where there was an authentic Indian reservation. We were lucky enough to see it before it was too "Touristy." It was a perfectly beautiful place. I went swimming in the nude there and someone took a picture of me unaware!

We went up through the Rocky Mountain National Park and Boulder Colorado. We stayed with some ~~friends~~ friends overnight. We had a nice view from their house and were treated quite well.

[END OF PART I]

Dear Jack,

I am enclosing the family tree which includes all the information I have been able to assemble.

You ask how I acquired the nickname "Pat" - The question really is when did I first find out my real name is "Cindus"! Actually as best I can piece together the story my mother liked the name "Pat" and decided before I was born that if she had a girl she would be named "Patricia" but, if a boy, I had to be named "Cindus" but would be called Pat anyway. I cannot vouch for the truth of this story as it obviously is hearsay as far as I am concerned.

I really have no childhood memories of West Virginia as I

don't recall any visits there until
after college. However, I do have
very vivid and happy random
memories of times spent with
Taylor uncle, aunts and cousins
beginning in Hanover with visits
by Ziggy and his bride, and
by Uncle Fred and Aunt Minnie
with Uncle Fred building a fantastic
igloo - Memories of my swimming
trips with Dad and Liz to New
Oxford and visits with all the
Hines - the Washington trips to
Jacelyn Street to see Jack & Jerry
and their great train set and
the wonder of the 1936 Chrysler
Airflow! Visits to Brookville
and flying kites all day with
Tom & Kirby - Kirby running
down to the store all afternoon
to get more balls of twine so
we could get that kite even higher.
The good times on Oak Ness St with

visits with Fred and Jack - the devotion of Uncle Tom with his daily visits to Dad after his heart attack - the Boston tree family that Buck and Dorcas provided in my Navy days, this loaning me their Ford convertible for dates with Marianna - the London Sunday dinners with Betty and Ned - Visits to West Virginia with my cotenant Godfrey and enjoying his quiet humor - But, of course, most of all, throughout my entire life I treasure the visits with our leader, Martha who keeps our Taylor family together and in touch with each other -

I wish you every success with your efforts in this undertaking - but we know if we can be of help - I will certainly help arrange the mining trip -
1855 - 1856

NAMES

How do couples choose names anyway. You can't wait to see how many children you'll have and then assign names to generation look-a-likes, or act-a-likes. No, you have to choose your favorite names - for whatever reason - and hand them out as the children show up.

Giving children names used in prior generations is the most common procedure. The Taylors and their spouses are no different than other families - we repeat a lot. And we repeat'em in different branches of the family.

If you have a rich Ugly Uncle or Arty Aunt, it's a good idea to cultivate the cash so some of it comes your way when and if disbursements are made. Taylors don't seem to have tried this ploy. Perhaps there never were enough really rich ones.

There is the name-that-sound or sound-of-the-name system. For instance, Jerry Taylor married Judith. So their children are James and Jennifer.

You can carry this type of naming to extremes. Dr. C.A. Rupert, the father of Taylor family Doctor in West Virginia, really went too far. A 1938 article from a Charleston paper had a story about it and listed the names.

"Early Physician - Dr. C.A. Rupert is one of the pioneer physicians of western Greenbrier. He was born at Point Pleasant, spent much of his early youth in South Carolina, but came to Greenbrier County when a young man, and was one of the largest landowners in the entire County. The town of Rupert bears his name, and is largely built on land formerly owned by Dr. Rupert. Dr. Rupert's wife was Rachel Elizabeth McClung, a descent of Wm. McClung, the first settler in western Greenbrier. Dr. Rupert was the father of 15 children, 8 daughters and 7 sons. Due to an eccentricity of the Doctor's, his 15 children bear names all beginning with the letter L. They are:

| | |
|--------|----------|
| Ledona | Laviro |
| Lorena | Livega |
| Lycena | Lualzo |
| Lactea | Ladura |
| Layuna | Leancy |
| Lomega | Leonidas |
| Lydaho | Lester |
| Lenida | |

Of the 7 sons, 5 were physicians. He also has three granddaughters who are graduate nurses and a grandson who is a dental surgeon. Three of the children still reside at Rupert, two at the old Rupert home."

Leonidas (Dr. Lon) married Mary Todd Rupert and moved to Colorado for his health. This is one reason why Ernest Jackson Taylor lived and died in Florence, Colorado. According to Martha Taylor, Dr. Rupert (C.A.) met his wife in this way. On one of his calls, he saw a baby in a cradle and announced that he would marry her when she was 16. And he did! Dr. Leancy brought Martha into this world in Nuttallburg February 28, 1898.

Another method of naming children is to become romantic. And the Nuttallburg area had black families that used this system. The Mushrush family named their twins Lonely and Desolate. And the Raglan family had at least 3 children with odd names:

Sara Fara Eliza Jane Almost Fortune Maria Pain Raglan
Temptation Touch Me Not Raglan
Maria Caroline Raglan - Queen Belle of the Green Spring

Of course one way to solve many name problems (disliked names, the same name in one house, etc.) is to use nicknames. Taylors, generally, have favored this approach; some people even received two. Of 20 first cousins sired by 5 sons and daughters of Jackson and Martha Taylor, 10 received nicknames that lasted all their lives. And these are real nicknames - not just contractions and common short forms of longer real names.

Marion L. Dawson - "Ziggy" - this Marine Corps General got his nickname from a "hazing" routine at Annapolis when he was a "plebe".

Godfrey Nuttall Taylor - "Fats" - older brother who was not, said he was. "Boye", after daughter Carter's "Boogie Bear" boogie designation

John Stanley Taylor - "Buck" - this name came from his liking for riding ponies, and he was named after a popular Western movie star.

William D. Taylor - "Twit" - because when you are little and have 4 older brothers you often have occasion to say, "Twit it!"
"Mike" - a second nickname.

Catherine W. Himes - "Fuzzy" - her friends at George School named her after her hair.

William D. Himes - "Buzzy".

Laurence T. Himes - "Lala" - he couldn't say Laurence when he was little.

Andrew E. Taylor - "Pat" - his mother just liked the name.

Thomas O. Taylor - "Tuck" - because mother's milk wasn't rich enough and little Tommy Tucker "sang" for his supper.

Jackson Taylor - "Jerry" - the "Jerry" comes from "Uncle Jerry" (Ernest Jackson Taylor).
"Jiggs" - from an old comic strip character.

There is a history of nicknames in the Taylor family going back to England. In Newbiggings "History of the Forest of Rossendale" printed at Rawtenstall in 1893, there is a chapter on Richard "Spindledick" Taylor who has been described as "The Last of the Ale Tasters. A copy follows.

No relation
Altho
Godfrey
claims
him.

Also following is a list of the first names of all the descendents of Jackson and Martha Taylor up until early 1982.

A final word about names. Thomas R. Dawson was given that name by his mother, but the Doctor named him Patrick Henry Dawson. He is listed under both names in the veteran register for World War II in Brooksville, Florida. Tom found out he had no name on his birth certificate when he tried to get a passport a few years ago. So he confirmed it as Thomas Raven - officially - after 50 years. And John Stanley Taylor found that he was listed as No Name Taylor in the birth records of Nuttallburg.

So, all ye who have read this far, take care how ye call thy offspring!

First Names of Descendents of Jackson Taylor
As of 5/1/82
4 Generations

Males

Abraham
Alexander
Andrew (6)
Benjamin
Brewster
Charles
Chester
Christopher (6)
Craig
Daniel (2)
David (5)
Ernest
Fred (2)
George (3)
Godfrey
Jackson (3)
James (3)
Jeffrey (2)
John (12)
Laurence (2)
Lindsay
Lucius
Marion
Matthew
Michael (4)
Nicholas (2)
Paul
Randolph
Rothwell
Samuel
Sean
Seth
Stephen
Taylor
Thomas (6)
Timothy
William (4)

Total 84

5 in first generation
15 in second generation
32 in third generation
32 in fourth generation

Females

Alice (3)
Ann
Anne
Avery
Beverly
Caroline
Carolyn
Carter
Catherine (5)
Christine
Cindy
Dearna
Debra
Elizabeth (5)
Erin
Ethel
Gail
Grace
Jan
Jennifer (2)
Judith
Julie
Kathryn
Kristin
Laurin
Lyndsay
Margaret (2)
Marion
Martha (2)
Mary (2)
Minnie
Nancy
Nora
Pamela (2)
Patricia
Robin
Samantha
Sara
Shirley
Susan (2)

Total 56

4 in first generation
5 in second generation
24 in third generation
23 in fourth generation

CHAPTER III.

"Yet spare I not to ply the pottle
Of jolly goode ale and olde."

BISHOP STILL—*Gammar Gurton's Needle.*

"A nose he had that gan show,
What liquor he loved I trow ;
For he had before long seven yeare,
Beene of the fowne the ale-conner."

—*The Cobler of Canterburie.*

"He was a man, take him for all in all,
I shall not look upon his like again."

SHAKESPEARE—*Hamlet.*

IN addition to the Greave of the Forest, other officers are annually appointed at the October sitting of the Halmot Court,—such as a Butcher, a Market-Looker, a Fence-Keeper, a Bellman, and an Ale-Taster.

The office of Ale-taster, or Ale-Conner, as is well known, is a very ancient one, extending as far back as Saxon times. Doubtless, it had its origin with that shrewd, frugal, calculating, paunch-loving people. There is nothing of the Celtic or devil-may-care element in its character. The Celt, to this day, is too spiritualistic, too precipitate, too mercurial, to cater largely for the stomach; the Saxon is of the earth; earthy.

It was the business of those who filled the post to insure that the ale and beer (a) brewed and sold or offered for sale within their

(a) Andrew Boorde, in his "Dyetary," says: "Ale is made of malte and water. . . . Bere is made of malte, of hoppes and water." This distinction would scarcely hold good at the present day.

district was good and wholesome and of the proper strength. Clearly the office was considered one of much importance in early times. The responsibility was great, and the confidence reposed in the judgment and honesty of the officer equally so. He appears to have depended chiefly, if not solely, on his fine critical taste for enabling him to decide on the quality of the beverage. Before the authorities, his evidence as against the offender was unquestioned.

In former days the Ale-Taster was also the Officer for the Assize of Bread, and the Oath taken by him on Assuming his duties was as follows :—

" You shall swear that you shall well and truly serve the King's Majesty and the lord of this leet in the office of ale-taster, or assisor of this liberty, for this year to come; you shall duly and truly see from time to time that the bread brought to be sold be truly weighed, and that the same do contain such weight, according to the prices of wheat, as by the statute in that case is provided; likewise, you shall have diligent care, during the time of your being in office, to all brewers and tiplers within your office, that they and every one of them do make good and wholesome ale and beer for man's body, and that the same be not sold before it be assayed by you, and then to be sold according to the prices limited and appointed by the King's justices of the peace; and all faults committed or done by the bakers, brewers, or tiplers, or by any of them, you shall make known, and present the same at this court, whereby due punishment may be inflicted upon them for their offences accordingly, and in every other thing you shall well and truly behave yourself in the said office for this year to come. So help you God."

The duties of the Rossendale officer are limited to the testing of the Ale and Beer, and we shall cease to wonder that this vigilant functionary should occasionally overstep the bounds of sobriety, and stumble on the other side—battering his nose on the unfeeling pavement—when we remember that there are within his jurisdiction more than 150 houses licensed for the sale of those drinks.

In the early days the punishment for brewing and publicly exhibiting bad ale was either a fine or a two hours' seat upon the cucking or cuck stool before the culprit's own door; the drink, if

pronounced by a discriminating judge to be *undrinkable*, being handed over to the poor folk.

The duties appertaining to the office (obsolete in most places) were, until within recent years, regularly fulfilled in Rossendale by an officer who did credit to the appointment. I refer to the late Richard Taylor, of Bacup, the Rossendale Ale-taster, who may with propriety be described as "The Last of the Ale-Tasters." As such, he deserves a word of commemoration. "Spindle Dick" he was usually called. The writer knew him personally, and had many a confab with him. Since the first edition of this work was published poor Dick has gone to render his account to a higher Court than that of the Lord of the Honor! He was a fellow of infinite humour, not wanting in sound judgment, but with that kind of twist in his nature that never would allow him for two minutes at a spell to treat any subject in a serious mood. His proper calling was that of a spindle maker, hence his sobriquet of "Spindle Dick;" a rare workman at his trade when he chose, and in his sober hours.

In his hands there was nothing incongruous or far-fetched in the office of Ale-taster. Its duties, incrustated with the antiquity of centuries, came as naturally to him as though he had been living in the time of the Heptarchy, and was "to the manner born." The incongruity was when he forsook, as he occasionally did, his ale-tasting labours, and applied himself assiduously to his business of spindle-making.

Poor Dick Taylor! I always felt grateful to his personality, and to the humour which girt him round. He was a link that bound us to the past; a kind of embodied poetical idea in keeping with the ancient Forest and its traditions. I have more than half a suspicion that he must have been lying dormant for centuries in the muniment-room of Clitheroe Castle, and, like Rip Van Winkle, awoke at length to resume his interrupted duties. I never conversed with him without being carried in imagination back to bygone times, and on such occasions it was with a half-resentful feeling of annoyance that the proximity of a later—shall

we be justified in saying a higher?—civilisation, in the guise of a smoky factory chimney, dispelled the illusion.

After all, it is only in a district like Rossendale that such an interesting relic of the olden time could have survived. To me, when I first knew them, the old people of Rossendale always seemed to differ in many respects from the people of other districts. This was not due to any single cause—there was a variety of circumstances which contributed to the result ; but the chief cause, in my opinion, is to be found in the natural character and formation of the district. By reason of its hills and the wide-reaching moorlands that environ it on every side, it was in earlier days, before the advent of the railway, removed to a large extent from contact with the outer world and the changing fashions and tendencies of wider social conditions. The older representatives of whom I speak are fast dying out, and the younger generation has lost, or is losing, the distinguishing characteristics of the race.

At one time in his career Dick kept a beer-house, the sign over the door being a representation of the globe, with the head and shoulders of a man protruding through it, and underneath it the legend, " Help me through this world ! " By way of counteracting any bad moral effects that arose from his vending of beer on week-days, he taught a Bible class in a room over the beer-shop on Sundays. He christened one of his sons " Gentleman," Gentleman Taylor, being determined, as he said, to have one gentleman in the family, whatever else.

When in discharge of the functions of his curious calling of Ale-taster, Dick carried in his coat pocket a pewter gill measure of his own fashioning, of peculiar old-world shape, with a turned ebony wood handle in the form of a cross that projected straight from the middle of the side. This symbol of his office was secured by a leathern thong about half a yard in length, one end being round the handle, the other through a button-hole in his coat. After a day's official work he might occasionally be seen, with unsteady gait, wending his way up the lane to his domicile on the hillside, with the gill measure dangling below his knee.

Not unfrequently he had to appear before the Bench for being drunk and incapable, and though he was sometimes mulcted in five shillings and costs, as often as not some smart sally of wit won the admiration and sympathy of the "Great Unpaid," who let him down as softly as their sense of duty would permit. Dick, on those occasions, would declare that it was his legs only, and not his head that was drunk, which I am inclined to believe was true. He would also assert that he was easily upset when only partially filled, but, when, like a barrel, full to the bung, and end up, he was steady as a rock. As a matter of fact, however, he was not a heavy drinker, whatever his detractors may say to the contrary. His centre of gravity (being raised from his stomach to his head) was displaced by a very limited supply of the beverage.

Regularly as the month of October came round, Dick put in an appearance at the Halmot Court of the Lord of the Manor or Honor held at Haslingden, was reinstated in his office with due formality, and dined with the other officials of the court when the formal business was concluded.

The following is a copy of a memorial presented by him in October, 1864, to the Court Leet. It contains some touches of dry humour highly characteristic of the man:—

"To the Foreman and Jury of the Halmot Court at Haslingden.
The respectful Memorial of your energetic Ale-Taster for
Rossendale, Richard Taylor.

"Gentlemen,—From a natural bashfulness, and being unaccustomed to public speaking, which my friends tell me is a very fortunate circumstance, I am induced to lay my claims before your honourable court in writing, hoping you will give them your most favourable consideration.

"The appointment which I hold is a very ancient one, dating, as you are aware, from the time of good King Alfred, when the jury at Court Leet appointed their head-boroughs, tithing man, bursholder, and Ale-taster; which appointments were again regulated in the time of Edward III., and through neglect this

important office to a beer-imbibing population ought not to be suffered to fall into disrepute or oblivion.

"In Rossendale there are countless numbers of practical followers of the school to which that illustrious Dutchman, Mynheer Van Dunck, belonged, and while they imbibe less brandy, they make up for it in beer. To some Rossendale men, indeed, beer is meat, drink, washing, and lodging; and do away with the office of Ale-taster, an inferior quality of the beverage may be sold, and the consequent waste of tissue among the working classes would be something awful to contemplate. Your honourable court, then, cannot but perceive the vast importance of my office.

"With the spread of intelligence in Rossendale there has been a proportionate increase of licensed public-houses and beerhouses, which has created a corresponding amount of responsibility in my duties. At the time when Rossendale was in reality a forest, and a squirrel could jump from one tree to another from Sharneyford to Rawtenstall without touching the ground, the office of Ale-taster was no doubt a sinecure, but it is so no longer. For three years I have upheld the dignity of your honourable court as Ale-taster without emolument, stipend, fee, or perquisite of any kind. I have even been dragged before a subordinate court and fined five shillings and costs whilst fulfilling the duties of my office. My great services should receive some slight acknowledgment at your hands, and thus would be secured the upright discharge of those duties you expect me to fulfil; and my imperial gill measure, which I carry along with me as my baton of office, should bear the seal of your honourable court.

"Praying for your kind consideration, I beg to submit this my third annual report:

"In my district are fifty-five licensed public-houses and sixty-five beerhouses. The quality of the beer retailed at these houses is generally good, and calculated to prevent the deterioration of tissue, and I do not detect any signs of adulteration. The only complaint I have to make is of the quality of the ales sold at Newchurch during the week in which Kirk Fair is held; they are not

then quite up to the mark in point of strength and flavour ; but this is an exception, and it is the only speciality that I feel bound to comment upon, save that which immediately concerns your obedient servant, Richard Taylor, Ale-taster for that part of Her Majesty's dominions known as Rossendale."

On a later occasion Mr. Taylor sent in his resignation to the court as follows :—

" To the Foreman and Jury of the Halmot Court at Haslingden, —Gentlemen, I respectfully, but firmly, tender my resignation as Ale-taster of the Forest, an office which I have held for seven years without any salary or fee of any description. During that period I have done my duty both to his Grace the Duke of Buccleuch (b) and to the inhabitants generally. From feelings of humanity I refrain from suggesting anyone as my successor, for unless he possesses an iron constitution, if he does his duty to the appointment, he will either be a dead man before the next court day or he will have to retire with a shattered constitution."

The Court, however, declined to entertain Mr. Taylor's petition, and reappointed him to the office he had so long filled with so much credit to himself—though with very questionable benefit—and to the advantage of the many thirsty souls within his jurisdiction.

Notwithstanding the remark at the opening of the petition, Dick, as a matter of fact, was not altogether unused to public speaking. At town's meetings he frequently held forth, and his rising was always welcomed as the signal for some sensible as well as humorous and sarcastic remarks.

The reference to " Kirk Fair," and to the quality of the ales sold there on those occasions, will be appreciated. I do not know what the Fair may be now, but within my recollection the streets of the village, for three successive days, were thronged with a surging mass of people on pleasure bent. As many of these came long

(b) His Grace the Duke of Buccleuch, as has already been explained (see Book Second, Chapter i.) is Lord of the Honor of Clitheroe, of which the Forest of Rossendale constitutes a part.

distances in the heat of summer, with their parched throats and high spirits, they were naturally less critical of the quality of their drink than at ordinary times, and the publicans, with what amount of truth, beyond the declaration of the official Ale-taster, I am not prepared to vouch, were suspected of taking advantage of the circumstances to thin down their ales.

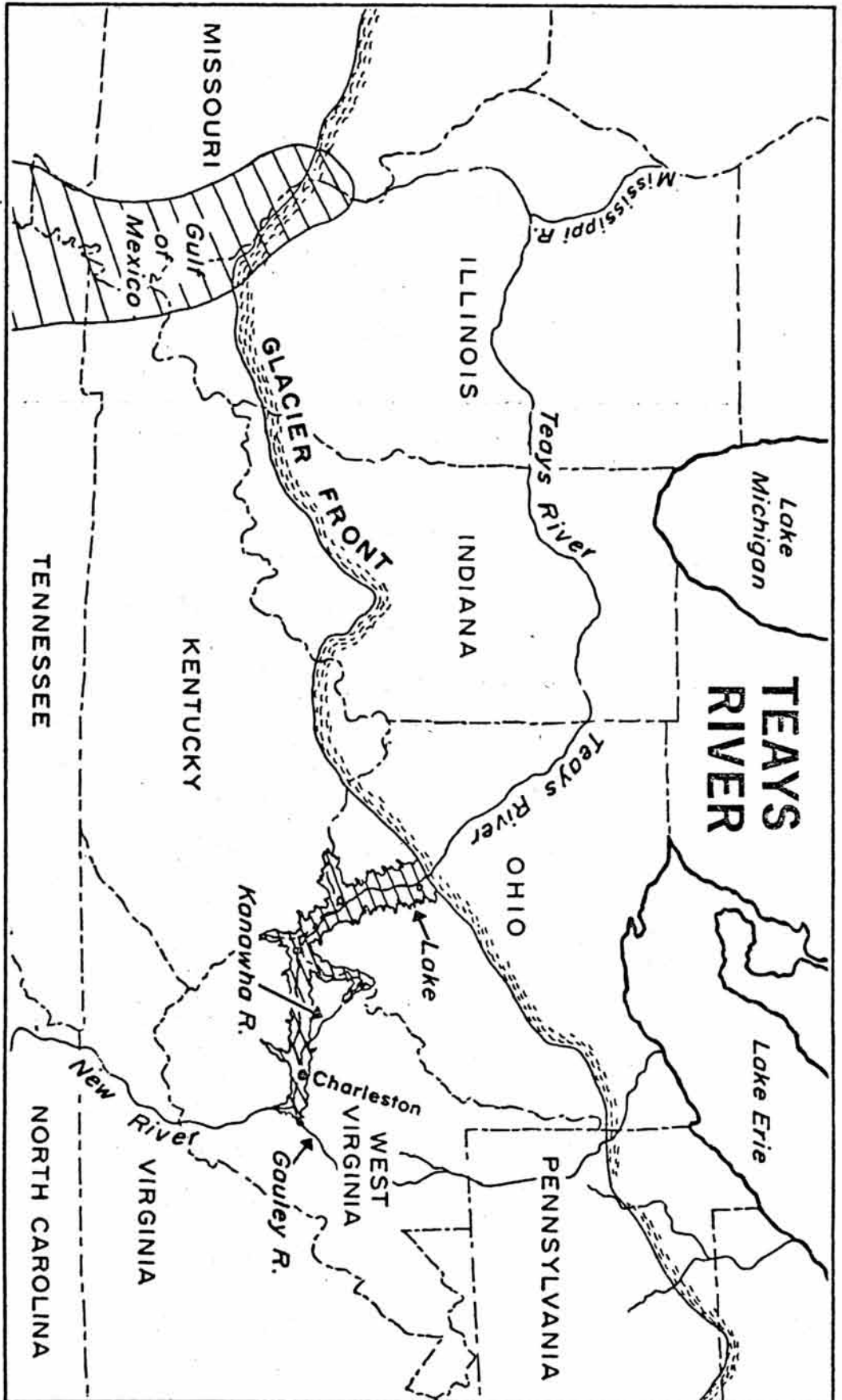
The post of Ale-taster, though still nominally maintained, is in reality obsolete, and could not be revived, even in out-of-the-way places, without committing an anachronism. Even in Dick Taylor's day the office was looked upon as belonging to the past—a relic of a bygone age, in which a different social system to the present prevailed. It belonged to the days of stocks and pillories, of ducking and cucking stools and scolds' bridles, of sluggard wakeners and dog whippers. *Tempora mutantur.* It needed a genial humorist to assume the duties of the office in this latter half of the nineteenth century, and a vulgar imitator would find no favour.

In a wide and populous district the duties, when conscientiously performed, were more than mortal stomach could bear unharmed, even though the paunch were like that of Falstaff, which Dick's was not, and leaving out of account the temptations which beset such an official. Dick took to ale-tasting as a jest, though he performed his duties with an imperturbable gravity which enhanced the fun of the situation. Keen as was his taste for ale, he had a keener relish for the humour of the position. Alas! it was joking perilously near to the edge of a precipice. The last of the Ale-tasters died, a martyr to duty, on the 10th day of October, 1876. *Sic itur ad astra.*



New River

Map shows the route of the ancient Teays River: the lower portion as covered by the glacier, the central portion as impounded into a lake, and the headwater portion now known as the New River. Also shown is the original Mississippi River, then a Teays tributary.



For more reading on the New River Area.
 See: *Bloodletting in Appalachia*
 by Howard B. Lee
 McClain Printing, 1969
 or
Wildwater West Virginia
 by Bob Burrell and Paul Davidson
 McClain Printing, 1972

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The New River—one of the oldest

Known by a rather inappropriate name, the New River is actually a remaining part of a much greater prehistoric river known by geologists as the Teays River. That ancient river had its origin well over 100,000,000 years ago in the ancestral Appalachian Mountains. In its entirety the Teays drained essentially the same territories as those drained by the Ohio and Mississippi systems today—from the Appalachians to the Great Plains, and from the Great Lakes to the Gulf of Mexico. More than 1,000 miles long, the Teays extended from North Carolina northwestward across Virginia, West Virginia, Ohio, Indiana, and Illinois. There it turned south toward St. Louis to enter a northern arm of the Gulf of Mexico, which then extended up the present lower Mississippi Valley as far as southern Illinois.

When the great glaciers of the last ice age moved from Canada into the United States, they spread farthest south in Illinois, reaching almost to its southernmost tip. In so doing, the ice moved over the lower half of the Teays River—from Chillicothe, Ohio, to its mouth below St. Louis—burying it beneath the ice sheet and filling its valley completely with sand, gravel, and other glacial debris. The upper half of the Teays River—from Chillicothe to the river's source in North Carolina—remained outside the boundaries of the ice sheet and continued to flow down toward the great glacier. The front of the glacier, standing as an immense wall of ice hundreds of feet high, produced an effective dam across the river's path, blocking the flow of water in the headward portion of the river and converting part of the stream into a long, narrow lake. The ponded waters rose until they covered the sites of various towns and cities that are today situated within or along the edges of the former lake.

The accompanying map shows the course of the former river and the territory covered by the extinct lake. The northwestern end of the lake was held in position by the great glacier itself, the waters standing in contact with the high wall of ice where it blocked the river at this point in Ohio. From there the lake waters extended southeastward to the Ohio-Kentucky boundary and on across at least half of West Virginia. Geological evidence of the lake's existence consists of sedimentary deposits laid down on its bottom. These deposits remain throughout much of the territory that had been flooded by the lake waters.

The ancient river had its source in the same general region as does the New River today, in the ancestral Appalachian Mountains, a vastly higher system that preceded the present ranges. These original mountains were eroded to an almost level plain during the Mesozoic Era. The Teays River was one of the streams that helped grind them down. In the course of time this plain was elevated to a high plateau, marked in the East by the present-day Blue Ridge. It sloped gently westward toward the sea that covered the lowlands of the present Mississippi Basin.

These physical changes did not destroy the Teays River. Rather it was carried upward by the rising lands. The uplift steepened the gradient and gave the stream additional power that allowed it to cut through the upraised rock layers. Hence it entrenched itself into the bedrock, retaining the course it had previously developed on the low, flat plain. Evidence of this can be seen today in the gorge of the New River. The deep canyon, with its winding course and steeply rising walls, marks the extent of the river's erosion since the uplift.

While the Teays River was in existence as the master stream of the east-central United States, it helped carve the landscape of a large part of the continent. The amount of sediment it eroded and poured into the sea was tremendous. This sea was the long former arm of the Gulf of Mexico, extending from New Orleans to southern Illinois, which has since been completely filled, the great delta deposits now jutting far beyond New Orleans. The building of this delta has been attributed to the Mississippi River, but actually the lower portion of the Mississippi south of Illinois has been in existence for only a relatively brief time in comparison with that of the former Teays. The greater bulk of the delta was built by the Teays; only the later portions were added by the Mississippi.

During the time that the lower half of the Teays River was covered by the glacier, and its intermediate portion was impounded into the lake, the stage was set for the changes in river drainage that were to occur when the great ice sheet finally melted away. The impounded lake waters had an overflow point near the site of Portsmouth, Ohio, which permitted them to escape toward the site of Cincinnati and onward to the Gulf of Mexico. The constant outflow of water along this route established the lower portion of what is now the Ohio River. The great glacier also reversed the flow of the Allegheny and Monongahela rivers, which had previously flowed northward to drain into the St. Lawrence River. They were now forced to join at the site of Pittsburgh and flow southwestward, thereby bringing into existence the upper portion of the Ohio. The Teays Valley itself, between the present cities of Huntington and Portsmouth, became the central portion of the Ohio River.

Meanwhile, as the glacial ice receded and the Ohio River became established, Teays Lake gradually drained away, but the Teays River did not return to its former valley downstream from the present locality of Nitro, West Virginia. Its headwaters—from North Carolina to Nitro—remained to become what we now call the New and Kanawha rivers. But at Nitro these waters found a lower outlet toward the present site of Point Pleasant, West Virginia, thereby establishing the lower course of the Kanawha and causing it to become a tributary of the newly formed Ohio River. Two portions of the Teays Valley—the parts between Nitro and Huntington in West Virginia, and between Portsmouth and Chillicothe in Ohio—were left completely abandoned. They are occupied today only by smaller local streams which became established after the ice age. The whole lower portion of the Teays Valley below Chillicothe and across Indiana and Illinois was completely filled with debris dumped into it by the great ice sheets. Therefore no surface valley remained to become reoccupied by a river after the glacier melted away.

A million years have passed since the glacial ice first spread southward from Canada into the United States and on across the valley of the Teays. During their time the ice sheets completely changed the face of the land over which they moved. They established the Great Lakes and left a hundred thousand smaller ones across the northern United States and Canada. They destroyed and buried beneath the glacial drift a once great river system. Their streaming meltwaters built a new system, that of the present Ohio; and they converted a relatively minor tributary into a mighty new master stream, the modern Mississippi. In spite of these far-reaching changes, the New River portion of the Teays system still remains today.

New River Gorge

National River
West Virginia

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Park Home

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John Nuttall

Places

Stories

Nature & Science

For Teachers

For Kids

News

Management

Support Your Park

Park Tools

View Park Map

FAQs

Contact Us

Site Index

Español

John Nuttall

Born in England in 1817, John Nuttall worked in mines starting at age eleven for most of two decades. He came to America in 1849. Working in a silk mill for seven years, Nuttall saved enough to pursue opening coal mines. With help from in-laws, he opened mines in western Pennsylvania. Successful, he learned of opportunity in New River Gorge, and opened mines here in 1873.

John Nuttall and his family prospered. When he died in 1897, the Nuttall family owned thousands of acres of land, operated profitable coal mines, and provided livelihood for hundreds of mine workers and their families. After John Nuttall's death, Nuttallburg lived on for 61 years until the mine closed for good in 1958.



It was the belief of [my grandfather] that the safest and most profitable investment that a man could make was the purchase of wild lands which had natural resources on or under them. Such lands should increase in value . . . [and] no trusted employee could embezzle them.

John Nuttall II, son of Lawrence Nuttall, and grandson of Nuttallburg's founder, John Nuttall

The Nuttall Family

John and Elizabeth Nuttall had three daughters and one son. The daughters all married, and their husbands and the Nuttall's son, Lawrence, managed and operated John Nuttall's mines. Lawrence and son-in-law Jackson Taylor came here to New River Gorge, the others stayed in Pennsylvania.

Lawrence William Nuttall

John Nuttall's son, Lawrence, helped manage his father's mines, but his passion was plants. He became a highly regarded botanist, discovering new species such as Fraser's sedge, here in New River Gorge.

[My father] went out every evening to gather plants and spent all of his spare moments in identifying his finds, among which were a couple of [species] that he could not identify. . . . they were a new discovery. . . .

John Nuttall II

New River Gorge

National River
West Virginia

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[Royal](#)

[Mill Creek and the Harrah Farm](#)

[Sandstone School](#)

[Nuttallburg](#)

[Stories](#)

[Nature & Science](#)

[For Teachers](#)

[For Kids](#)

[News](#)

[Management](#)

[Support Your Park](#)

[Park Tools](#)

[View Park Map](#)

[FAQs](#)

[Contact Us](#)

[Site Index](#)

[Español](#)

Nuttallburg

Nuttallburg Yesterday

Nuttallburg was one of almost fifty towns that sprang up along the New River in response to a growing nation's need for coal.

In 1870, England-born entrepreneur [John Nuttall](#) saw opportunity in the coal rich New River gorge and began buying land and building infrastructure along the Keeney's Creek drainage. When the Chesapeake & Ohio Railway was completed through the gorge in 1873, the town was ready for its arrival. Nuttallburg became the second mining town in the New River gorge to ship the "smokeless" coal, processed from a mineral seam hundreds of feet above the river corridor and shipped to industrial cities hundreds of miles away.



Nuttallburg coal conveyor and tipples c. 1927

Nuttallburg was a bustling mining community by the turn of the century, continuing to thrive after Nuttall's death in 1897 under the direction of his heirs. The town became the focus of national attention in the 1920's when, in an effort known as "vertical integration" to gain control of all aspects of production, automobile industrialist Henry Ford leased the town's mines to provide coal for his company steel mills. The Fordson Coal Company made many improvements to the mine and town during the eight year tenure, but Ford's plan for "vertical integration" failed when it became evident he could neither control, nor afford to buy, the railroad that was responsible for transportation of the coal his mines produced. He sold interests in the Nuttallburg mines in 1928.

The mines of Nuttallburg passed through three owners after Henry Ford, with production limited to primarily local use in later years as the market for New River coal declined. Production ceased in 1958 and Nuttallburg became like so many other riverside communities that rose and fell due to changes in the industry. A collection of empty buildings and structure-less foundations, concealed beneath trees and vines, is all that remains.

Nuttallburg Today

In 1998 the Nuttall family transferred ownership of Nuttallburg to the National Park Service. The site was inventoried, documented, and in 2005, listed on the National Register of Historic Places. In 2011 the National Park Service completed a multi-year project that involved clearing vegetation and stabilizing structures. Today it is considered one of the most intact examples of a coal mining complex in West Virginia and one of the most complete coal related industrial sites in

the United States.

Nuttallburg is a nationally significant, protected historic site. Please help us preserve it. Do not remove or deface any artifacts and report any acts of vandalism to a park ranger or local authorities at 304-465-0508.



To Visit Nuttallburg

Use caution when driving to Nuttallburg. Many of the country roads are narrow, winding, steep, and often one-lane paved or one-lane gravel road. Large vehicles and trailers are not advisable.

Driving to Nuttallburg

From Canyon Rim Visitor Center, go north on US 19 0.3 miles to the next intersection, and turn right onto Lansing-Edmond Road (County Route 5/82). Follow Lansing-Edmond Road (becomes CR 82) 6.0 miles to Winona. Turn right onto Keeneys Creek Road (CR 85/2), continue past the houses (do not cross the creek) and the road turns to gravel. Travel 4.1 miles to the main Nuttallburg parking area and restroom. Parking for disabled visitors is located an additional 0.1 miles beyond the main parking area, closer to the tippie.

Winona can also be reached from the Canyon Rim Visitor Center by traveling north on US 19 to Hico 5.0 miles. Go east on US 60 (Midland Trail) 4.4 miles to Lookout, turn right onto Lansing-Edmond Road (CR 82) and go 2.1 miles to Winona, then follow the directions above for Keeneys Creek Road (CR 85/2).

Along the Way

You will be passing through what was once Nuttallburg's African American community before you reach the main parking area. Exhibit panels located at pull-offs along the road interpret this and other features. Stop on the drive in or walk the short distance back from the main parking area to get a better picture of what life was like in the historic community.

Hiking to the Headhouse

The easiest way to the headhouse area of Nuttallburg is located off Beauty Mountain Road near Lansing. From U.S. 19, take Lansing-Edmond Road (CR 5 becomes CR 82) 2.5 miles and turn right onto Beauty Mountain Road (CR 85/5). Travel 0.1 miles, then turn right onto the road just beyond Nuttall Cemetery Road. A parking area is located before the gated service road. Hike down the Headhouse Trail 0.5 miles to the headhouse area of Nuttallburg. Caution: this hike is steep and strenuous.

Did You Know?



You can "catch a train" to visit the park! The AMTRAK Cardinal travels through New River Gorge on its route from New York, NY to Chicago, IL.

[WV Railroads Photos \(Home\)](#) ::: [WV Railroads: Main Site](#) ::: [WV Railroads: Forums](#)

Nuttallburg Mine Complex - New River Gorge

15 images in this album

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Gallery: West Virginia Railroads - Model Railroading: Photos ↗

Nuttallburg Mine Complex

Location: [Nuttallburg, WV](#), on the north side of [New River](#), in the [New River Gorge](#), 2.7 miles upstream from Lookout, West Virginia (WV)
Map: [Nuttallburg \(historical\)](#)

One of the earliest coal mining operations in the [New River Coalfields](#), the the Nuttallburg mine began operation in 1873, the same year the Chesapeake & Ohio Railway (C&O) completed its line through West Virginia. The drawings show the mine's headhouse, tippie and conveyor system as rebuilt during the 1920's. Since the Nuttallburg plant was in operation through 1958, the plans would be appropriate for modeling a coal mining operation from the early-1920's through the late-1950's.

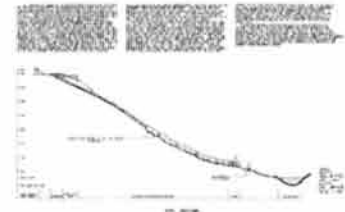
Large scale versions of these drawings: can be downloaded at [HABS/HAER](#), the Historic American Buildings Survey (HABS) and the Historic American Engineering Record (HAER) collections at the Library of Congress website. Visit [WVExp.com](#) for more information on the town of [Nuttallburg, WV](#).



Cover sheet for the scale drawings of the Nuttallburg coal mining complex, from the HABS/HAER collections.



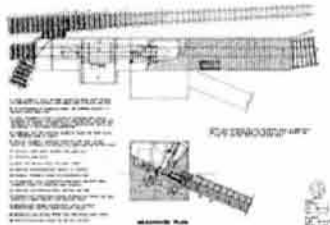
Site plan of the Nuttallburg mining complex, showing location of tippie, conveyor, headhouse, power house, company store, and other structures/facilities.



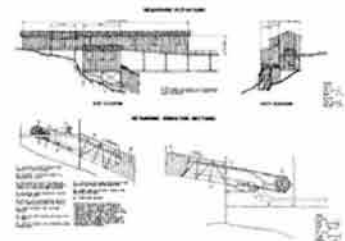
Site section drawing, showing side elevation view of the Nuttallburg mine headhouse, conveyor, and tippie



Bench level scale drawing of the Nuttallburg mine, showing layout of facilities at the "top" of the complex, e.g., where the coal was



Headhouse plan of Nuttallburg mine, showing layout of dump chutes, mine tracks, etc.



Side elevation drawing of headhouse at the Nuttallburg mine, showing cross-section views of the Retarding Conveyor, etc.

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Nuttallburg Mine Complex - New River Gorge

Gallery: West Virginia Railroads - Model Railroad: Photos Album: Nuttallburg Mine Complex - New River Gorge

1 of 15

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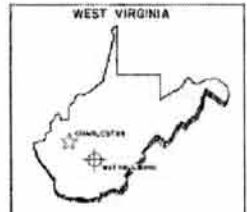
Nuttallburg Mine Complex 1873

LOOKOUT VICINITY FAYETTE COUNTY WEST VIRGINIA

THE NUTTALLBURG MINE COMPLEX IS LOCATED ON THE WESTERN SIDE OF THE NEW RIVER GORGE. MINING IN THE NEW RIVER GORGE PRESENTED SPECIAL PROBLEMS, BOTH IN FIELD ENGINEERING AND TRANSPORTATION. NEW RIVER MINES OVERCAME FIELD ENGINEERING PROBLEMS BY CONSTRUCTING UNDER MINING STRUCTURES. THE PROBLEM OF TRANSPORTING COAL OUT OF THE GORGE WAS SOLVED WITH THE CONSTRUCTION OF THE OYSTERFORD AND OLD KING RAILWAY IN THE EARLY 1870S. ITS CONSTRUCTION ALLOWED THE TRANSPORTATION OF COAL OUT OF THE DEEP GORGE FOR DELIVERY TO WESTERN AND THROUGH MARKETS, AND THIS LED TO THE WIDESPREAD DEVELOPMENT OF THE NEW RIVER FIELDS. OPENED IN 1873, THE NUTTALLBURG MINE WAS ONE OF THE EARLIEST MINES TO BEGIN OPERATIONS IN THE NEW RIVER FIELD, AND TO SHIP COAL ON THE C&O. THE TOWN AND MINE WERE NAMED FOR FOUNDER JOHN NUTTALL, A PHOENIXVILLE CAPITALIST, WHO CAME TO FAYETTE COUNTY, WEST VIRGINIA IN 1810, ACCORDING TO THE JOURNAL OF THE C&O. DURING THE 1800s, THE NUTTALLBURG MINE WAS OWNED BY HENRY FORD, WHO MADE MAJOR IMPROVEMENTS AT THE SITE, ERECTING A MODERN TYPING, HEADHOUSE, AND CONVEYOR

FORD LATER SOLD THE MINE TO THE HANVELAND NEW RIVER COAL COMPANY, WHO OPERATED IT UNTIL IT CLOSED IN THE 1920S. THE NUTTALLBURG MINE COMPLEX IS SIGNIFICANT FOR SEVERAL REASONS. NUTTALLBURG WAS ONE OF THE EARLIEST MINES TO OPEN IN THE NEW RIVER FIELD. THE CABLE RETURNING CONVEYOR IS ONE OF THE LONGEST CABLE CONSTRUCTED, AND IS ONE OF A FEW STILL EXISTENT. THE NUTTALLBURG MINE IS REPRESENTATIVE OF PIONEER INDUSTRIALIZATION, AND IS TYPICAL OF THE EARLY TWENTIETH CENTURY EXTRACTIVE INDUSTRIES IN BOTH THE NEW RIVER GORGE AND WEST VIRGINIA. THE NUTTALLBURG MINE COMPLEX PRESERVES PROJECTS WHO UNDERSTOOD DURING THE SUMMER AND FALL 1999 BY THE WEST VIRGINIA UNIVERSITY INSTITUTE FOR THE HISTORY OF TECHNOLOGY AND INDUSTRIAL ARCHAEOLGY FOR THE HISTORIC AMERICAN ENGINEERING RECORDS DIVISION. A LONG RANGE PROGRAM TO DOCUMENT HISTORICALLY SIGNIFICANT ENGINEERING AND INDUSTRIAL WORKS IN THE UNITED STATES. A DIVISION OF THE NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR, THE HAER PROGRAM IS ADMINISTERED BY THE HISTORIC

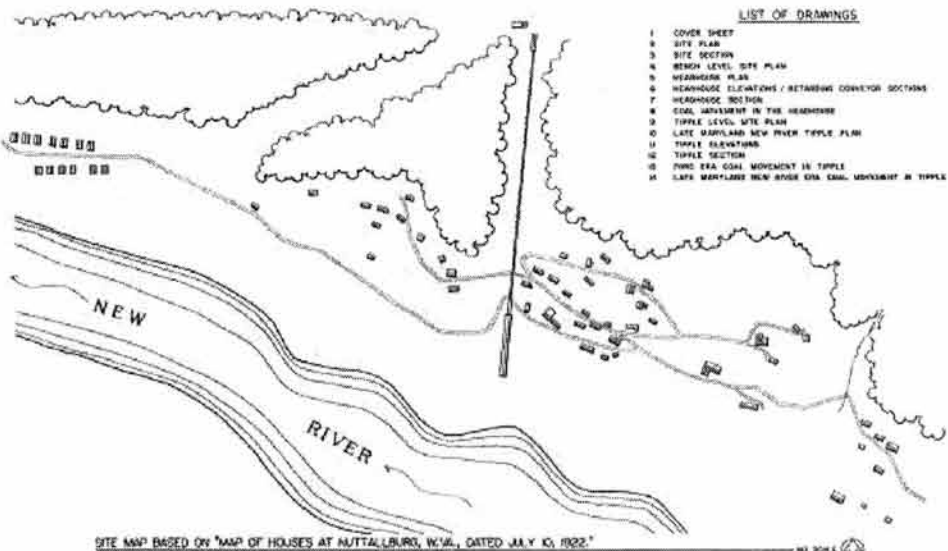
AMERICAN RAILROAD SURVEY/HISTORIC AMERICAN ENGINEERING RECORDS DIVISION, DR. ROBERT KAPFICH, CHIEF. THE NUTTALLBURG MINE COMPLEX DOCUMENTATION WAS SPONSORED BY THE INSTITUTE FOR THE HISTORY OF TECHNOLOGY AND INDUSTRIAL ARCHAEOLGY. THE FIELD WORK, MEASURED DRAWINGS, HISTORICAL REPORTS AND PHOTOGRAPHS WERE PREPARED UNDER THE GENERAL DIRECTION OF DR. EMORY L. REAM, INSTITUTE DIRECTOR. THE FIELD TEAM CONSISTED OF PROJECT MANAGER AND CHIEF HISTORIAN LEE R. HANDEL, CHIEF DELINEATOR AND FIELD SUPERVISOR KEVIN MACLEOD, ASSISTANT DELINEATORS PMA. BOALEY, JEFF CONROY, JOHN HERRMAN, AND JOHN BEJANOWICZ AND SURVEYOR AND ASSISTANT HISTORIAN EDWARD WHEAT, WITH ADDITIONAL HELP FROM MINE MANAGER (EMERY), COORDINATOR OF INTERNATIONAL PROGRAMS PORNAL PHOTOGRAPHY WAS DONE BY DR. EMORY L. REAM, INSTITUTE DIRECTOR. UTM LOCATIONS: 17496320-428600 (MINE OPENING) 17496240-428200 (TIPPLE)



REGION MAP FROM MINES AND MINING, VOL. 24, NO. 1, DECEMBER 2001



LOCATION MAP FROM WEST VIRGINIA DEPARTMENT OF HERITAGE COUNTY 1962, 2014



LIST OF DRAWINGS

- 1 COVER SHEET
- 2 SITE PLAN
- 3 SITE SECTION
- 4 BENCH LEVEL SITE PLAN
- 5 HEADHOUSE PLAN
- 6 HEADHOUSE ELEVATIONS / BETWEEN CONVEYOR SECTIONS
- 7 HEADHOUSE SECTION
- 8 COAL ADVANCEMENT IN THE HEADHOUSE
- 9 TIPPLE LEVEL SITE PLAN
- 10 LATE SHIP-LAND NEW RIVER TIPPLE PLAN
- 11 TIPPLE ELEVATIONS
- 12 TIPPLE SECTION
- 13 THIRD YEAR COAL MOVEMENT IN TIPPLE
- 14 LATE SHIP-LAND NEW RIVER COAL MOVEMENT IN TIPPLE

SITE MAP BASED ON "MAP OF HOUSES AT NUTTALLBURG, W.VA., DATED JAN. 10, 1922." COURTESY OF NEW RIVER GORGE NATIONAL RIVER HEADQUARTERS, GUY 24N, WEST VIRGINIA.

Cover sheet for the scale drawings of the Nuttallburg coal mining complex, from the HABS/HAER collections.

1 of 15

Gallery: West Virginia Railroads - Model Railroad: Photos Album: Nuttallburg Mine Complex - New River Gorge

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Jeffrey Taylor

From: John Taylor <jtaylor@johntaylorstudio.com>
Sent: Wednesday, June 06, 2012 2:08 PM
To: Taylor Tim; Jeffrey Taylor; Taylor Carter
Cc: Engle Sallie Jock &; Taylor Rusty
Subject: Nuttallburg Excursion

Hi All,

We just completed our northward migration after spending some delicious time in FL and SC. Fortunately we managed to escape the sunshine and warmth and are now basking in rainy, 52-degree weather.

On our way back we spent a little time in WV visiting with Jock and Sallie Engle, whom we met at Tim and Becky's gala Valentine's Day dinner in Destin. (Thank you T&B for that intro.) The Engles provided a wonderful parking spot for our Airstream at their cabin above the Gauley, and we thoroughly enjoyed the time we spent with them at their lovely home in Summersville and aboard their pontoon boat on beautiful Summersville Lake.

We spent half a day exploring the Nuttallburg site, and we were impressed by all the work the USPS has done - uncovering ruins, restoring the tipple, head house and conveyor, providing numerous interpretive plaques, and creating very passable access all the way down along Short Creek. (I still remember the harrowing journey across the questionable RR trestles with Rick Persinger many years ago.) I want to thank you all again for your work in making this restoration a reality. It was such a kick to see the foundations of the home and adjacent buildings where our dads probably played as tykes.

I have attached a number of photos from the excursion. I hope you enjoy them. We had a great time, and we look forward to returning before long. We're seriously trying to work next year's reunion into our travel plans. We hope to see you then.

John

PS: I have hi-res versions of these photos, in which most of the interpretive text is readable. So let me know if you would like any of them.



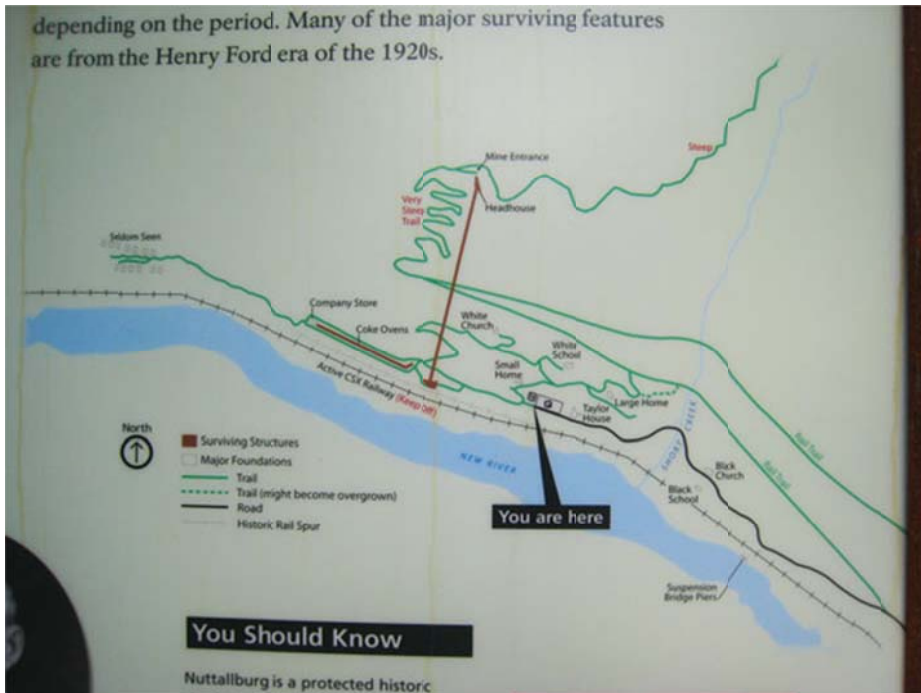
View of Gauley River from Engle's cabin



Ruins of Taylor house



Interpretive plaque beside Taylor house ruins



Map showing primary components of Nuttallburg (all with interpretive plaques)



Restored tippel and conveyor



Path along row of scores of coke ovens



Coke oven info



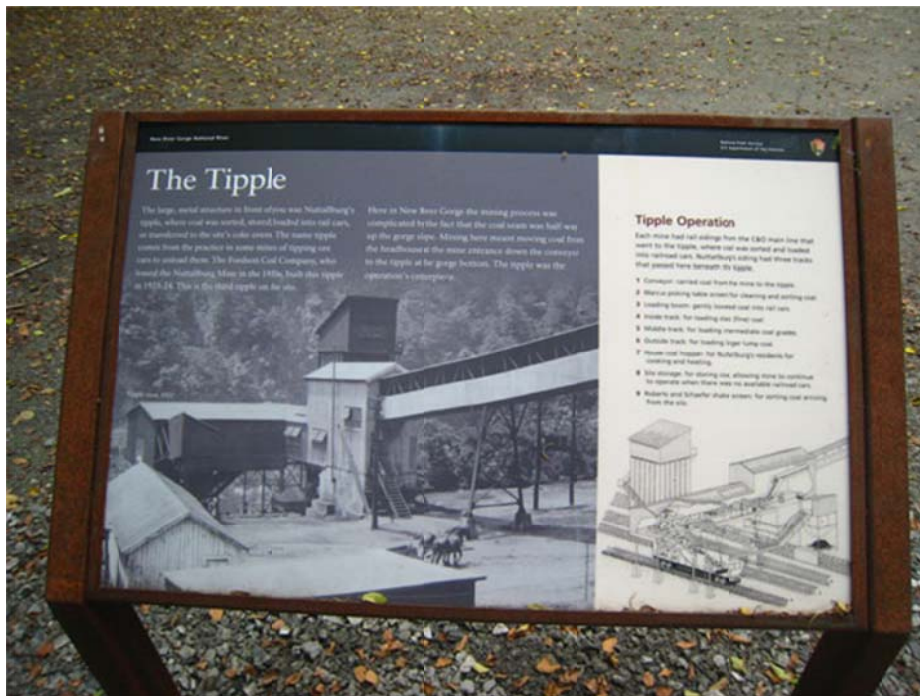
Ruins of Company Store



Company Store info



Tipple and conveyor



Tipple info



Info about Nuttall RR Station



Foundations of Black School at Nuttallburg



Piers that supported suspension pedestrian bridge that crossed the New River and connected Nuttallburg with South Nuttall (sometimes called Brown). Interestingly, the bridge was built by the Roebling Co - the same co that built the Brooklyn Bridge.



Beautiful Summersville Lake (surrounded by protected Federal lands)

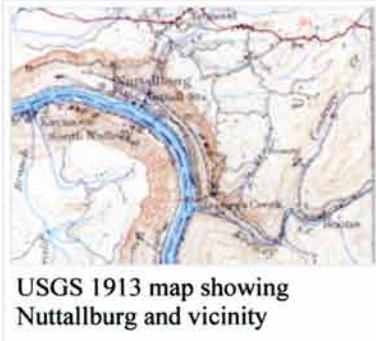


Sunset on Summersville Lake, as seen from the promenade deck of the SS Engle.

Nuttallburg (historical)

From West Virginia (WV) Cyclopedia

In 1873, the



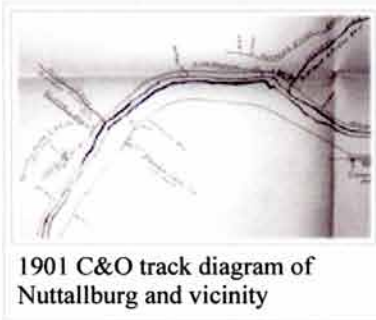
USGS 1913 map showing Nuttallburg and vicinity



Remains of suspension bridge at Nuttallburg that once linked the two mining towns on opposite sides of the New River



Nuttallburg incline and tippie in 1968 -- about 10 years after the mine closed



1901 C&O track diagram of Nuttallburg and vicinity

Nuttall Company opened its mining operation at Nuttallburg, under the leadership of John Nuttall, an English immigrant and Pennsylvania capitalist. The Nuttallburg mining operation was one of the earliest mining operations opened in the New River Gorge, beginning to ship coal from the mine just after the Chesapeake & Ohio Railway was completed in 1873. By 1878, 40 coke ovens were in operation at the Nuttallburg coal plant. The mining community was known as Nuttallburg, but the station established there by the Chesapeake & Ohio Railway (C&O) was named "Nuttall" and the station on the opposite side of New River was named South Nuttall. The Nuttallburg post office was established in 1873, and was moved to Winona in the mid-1950s.

In 1882, Nuttall reorganized his company as the Nuttallburg Coal and Coke Company, incorporating additional coal holdings he had acquired, including 25,000 acres of coal lands along Keeney's Creek. The Nuttallburg mine and plant continued operation under ownership by the Nuttall family for several decades but was eventually leased to outside operators. In 1920, Henry Ford & Sons purchased the Nuttall lease and soon afterwards began modernization of the plant. The Fordson Coal Co. was formed to handle the operation of the Nuttallburg mine and of other mine leases Ford had purchased in McDowell County. The Nuttallburg mine was to supply high-quality steam coal for Ford's River Rouge Automobile Plant. The Fordson company had limited success with the mining operation. State mining records indicate the Fordson Coal Co. had production from the Nuttallburg mine during 1923-1927. In the late 1920s, the Nuttall plant was acquired by the Maryland New River Coal Company. In 1928, the new owners renamed the Nuttallburg mine "Dubree No. 4." The Nuttallburg's coal production peaked in 1929 with 171,179 tons of coal being produced that year. Maryland New River continued operation of the plant until



Nuttallburg incline and tippie in distance, as viewed from Kaymoor "Top"

Nuttallburg Mine

*This is what I had
 Dan to send you!*

HISTORIC AMERICAN ENGINEERING RECORD

NUTTALLBURG MINE COMPLEX 1873 HSER No. WV-51

Location: North side of the New River, 2.7 miles upstream from Fayette Landing, Fayette County, West Virginia.

UTM: Mine Opening, 17.496325.4211600
 Tipple, 17.496240.4211205
 Quad: Fayetteville, West Virginia

Fabricator: Tipple: Roberts and Schaefer Company
 Chicago, Illinois
 Headhouse: Fairmont Mining Machinery Company
 Fairmont, West Virginia
 Conveyor: Fairmont Mining Machinery Company
 Fairmont, West Virginia

Date of Construction: Mine, 1873
 Tipple, 1923-24.
 Headhouse/Conveyor, 1925-26.

Present Owner: The John Nuttall Estate

Present Use: None

Significance: The Nuttallburg Mine was one of the earliest mines to open in the New River Field. The Retarding Conveyor is one of the longest ever constructed and perhaps one of the few still extant. The Nuttallburg Mine Complex is representative of the rural industrialization and is typical of the extractive industries located in the New River Gorge and West Virginia.

Project

Information: The Nuttallburg Mine Complex recording project was undertaken during the summer and fall of 1991 by the West Virginia University Institute for the History of Technology and Industrial Archaeology for the Historic American Engineering Record.

Lee R. Maddex
 Research Assistant
 Institute for the History of Technology
 and Industrial Archaeology
 West Virginia University
 Morgantown, West Virginia 26506

Table of Contents

| | |
|---|---|
| Preface | |
| Acknowledgements | |
| Methodology | |
| Introduction | |
| Part I: The Corporate History of the Nuttallburg Mine Complex | |
| Section 1.1 | New River Gorge Introduction Fayette County Geography Early History of Fayette County Construction of the Chesapeake and Ohio Railway The New River Field |
| Section 1.2 | The Evolution of the Nuttallburg Mine Complex John Nuttall (1819-1897) Nuttall Family Era 1873-1900 An Era of Change 1900-1920 Ford Era 1920-1928 Maryland New River Era 1928-1953 Garnet Coal Company Era 1954-1958 The Town of Nuttallburg |
| Part II: The Technology of the Nuttallburg Mine Complex | |
| Section 2.1 | Introduction |
| Section 2.2 | Extracting, Conveying, and Processing Coal Underground Mining Headhouses, Monitors and Conveyors Tipples Refuse Coke and Coking |
| Section 2.3 | Ancillary Mine Structures Fan House and Ventilation Powerhouse and Substation Cap and Powder Houses Sand Houses Oil Storage Tank Company Store Miscellaneous Shops and Buildings |
| Section 2.4 | Transportation Underground and Surface Haulage Hoist House and Mountain Haulage Nuttallburg Suspension Bridge |

Section 2.5 Conclusions

Section 2.6 Call For Further Research

Section 2.7 Appendices

- Appendix I: 1903 Mine Site Inventory
- Appendix II: Nuttallburg Coal Production 1883-1958
- Appendix III: Nuttallburg Coke Production
- Appendix IV: Ford Era Production-Nuttallburg vs
Twin Branch
- Appendix V: Nuttallburg Employment Statistics
- Appendix VI: Pick Production vs Machine Production

Endnotes

Bibliography

Preface

A clear need exists to document America's industrial heritage before it molders back to nature or is razed to make way for new malls. For example, America's once mighty steel industry has been in steady decline since the early 1970s and now forms the basis for the "rust belt." Mechanization of coal mining has resulted in fewer jobs for fewer miners, and the 1990 Clean Air Act sounds the death knell for the high-sulfur bituminous coal industry.

Fortunately, the Historic American Engineering Record (HAER) program was established to document significant American industrial and engineering works. HAER has undertaken the recording of not only steel mills and coal mines, but also bridges, tool works, maritime vessels, canals, railroads, and other relics of our industrial past. With this in mind, the West Virginia University Institute for the History of Technology and Industrial Archaeology proudly presents its premiere HAER level recording of an industrial site: the Nuttallburg Recording Project. The following narrative report, entitled "The Nuttallburg Mine Complex" is the historical component of the standard HAER documentation package. The remaining components include measured drawings and large format photography.

The Institute was founded in 1989 as an institute of academic and professional excellence to support public and private programs concerned with the history of technology, industrial archaeology and the preservation of engineering works. For the past two decades members of the Institute staff have been extensively involved in teaching and research in the history of science and technology and in the new field of industrial archaeology, utilizing a multi-disciplinary approach to historic preservation and interpretation of industrial and transportation sites. In addition to director Emory L. Kemp, who is a structural engineer, there are historians, landscape architects, and other preservation oriented professionals working with the Institute who have experience in the field of site recording using advanced techniques of photogrammetry and cartography. The Institute also enjoys a close professional affiliation with a leading firm of preservation architects, who have participated in a number of relevant projects. The Institute serves not only projects throughout West Virginia and the Appalachian Region, but also those of national significance elsewhere.

The following narrative report has two principal components. The first part focuses on the corporate aspects of the mine site and the second examines the technological considerations of the Nuttallburg Mine Complex. Part I is entitled "The Corporate History of the Nuttallburg Mine Complex," with the subsequent discussions further refined into sections. Section 1.1, "New River Gorge Introduction," is intended to introduce the reader to the geography and early history of Fayette County, the construction of

the Chesapeake and Ohio Railway, and the subsequent opening of the New River Field.

Section 1.2, "The Evolution of the Nuttallburg Mine Complex," documents the corporate history of the Nuttallburg Mine and the subsequent growth of the village of Nuttallburg. Specifically, the narrative traces the establishment of the mine site and changes in the mine's ownership. The narrative begins with the early life and times of John Nuttall. The ensuing sub-sections focus on the history of the mine and are broken down into eras which relate to specific years of mine ownership, as this is the most obvious and convenient way to break up the narrative. Lastly, a short essay gives a glimpse of life at the village of Nuttallburg.

Part II, "The Technology of the Nuttallburg Mine Complex," examines the types of and changes in the technology utilized at the Nuttallburg Mine to extract, convey, and process coal. During the course of operations at the Nuttallburg Mine, the technology used to mine and process coal changed drastically. This change was manifested in many ways. For example, traditional pick mining was superseded by coal cutting machinery; hand loading coal changed to machine loading; mechanical haulage replaced animal powered haulage; gravity screens evolved into shaker and vibrating screens; and coal washing, once disregarded, became standard practice. This part of the narrative tracks the shift of coal mining from the traditional methods of the nineteenth century to the advent and implementation of mechanization in the early-to mid-twentieth century. The Nuttallburg Mine may be viewed as a case study in the mechanization of coal mining.

Section 2.1 is an introductory section to the technology of the site with an explanation of the themes used in Part II of the narrative. The "Introduction" also gives a general description of the movement of coal from the Mine to the Tipple.

Narrative Section 2.2, "Extracting, Conveying, and Processing Coal," documents the technology employed to win, transport, and sort coal from the mine to the tipple. This section has been developed thematically and is intended to be read either together, for a complete explanation of coal movement from the bench to the tipple, or individually as case studies in mining and processing technology.

Section 2.3, "Ancillary Mine Structures," examines those structures and processes related to the mining and processing coal, which do not fit into the categories in "Extracting, Conveying, and Processing Coal." Topics discussed include Mine Ventilation, Powerhouses and Substations, Cap and Powder Houses and other dependencies important to the mine operation. Also included is a discussion of Miscellaneous Shops and Buildings. This includes structures such as the lamp house or the mine office that ordinarily would be located at a mine site, but are not readily

identifiable or locatable at the Nuttallburg Mine.

Section 2.4, "Transportation," examines the transportation systems at Nuttallburg. In particular the Underground and Surface Haulage systems, the Hoist House and Mountain Haulage, and the Nuttallburg Suspension Bridge.

Section 2.7, "Appendices," contains supplemental information about the mine and its operation, documenting the equipment and housing at both the Nuttallburg and Keeney's Creek mines in 1903. Included are tabulations of the mine's coal production, coke production, mine employment statistics, and a comparison of the Nuttallburg Mine with the Twin Branch Mines during the Ford era.

Acknowledgements

The research and preparation of a narrative of this length and breadth required more than one person's effort. The field recording team deserves special recognition for their tireless efforts in the humid New River Gorge often hiking into and out of the site. This team consisted of Institute staff delineators Kevin McClung, John Rudman, Paul Boxley, Joe Condie, and surveyor and assistant historian Ed Winant. Council of International Programs participant, Mine Kangal, of Turkey, provided additional help. Likewise, the studio team merits a special thanks for their excellent work. The studio delineators included staffers Kevin McClung, Paul Boxley, John Hriblan, John Rudman, and Joe Condie.

In addition to the field and studio teams, the project involved many other people. The Institute staff was very important in executing this project, particularly Michael "Eddie" Workman and Billy Joe Peyton for their time and help in editing this document. Staffer Michael Caplinger also helped during one of the many returns to the site for more measurements and investigations. Institute secretaries Rena Taft, Donna Cayton, and Carol Lones, deserve special thanks for managing the recording team's travel and other expenses, and for generally seeing that things moved as smoothly as possible on their end. Lastly, formal large format photography was conducted under the direction of Institute Director, Dr. Emory L. Kemp, who deserves special thanks for the enthusiasm he brings to projects such as the Nuttallburg Recording Project.

The staff of the West Virginia and Regional History Collection merit special thanks, particularly Annette Cotter and David Bartlett for their help in locating collections and other archival materials. The New River Gorge National River Park Library deserves thanks for furnishing the author with valuable maps, photographs and documentation on John Nuttall, with special thanks to Reba Scott, Park Librarian. A very special thanks to Thomas Eiff, Nuttall Trustee, who made it possible for the team to work on-site, and who was very helpful in providing the author with contacts for investigation.

Methodology

The HAER level Nuttallburg Recording Project constituted the combined efforts of a team of Institute staff delineators and historians with two distinct phases. The field work and historical research occurred during the first phase. In the second phase, after returning to studio and office, the measured drawings and historical narrative were prepared.

In late May 1991, the first phase began when the recording team entered the field and began sketching and measuring the structures that comprise the site. This process took approximately eight weeks to complete. The field team sketched and measured the principal extant structures, namely the Tipple, Headhouse, and Conveyor. Other important structures such as the Hoist House, Fan House, and Coke Ovens were also documented at this time.

While the recording team worked in the field, the historian began to research the historical narrative. He made extensive use of the materials available in the West Virginia University Library System at Morgantown, undertaking a very time consuming and tedious examination of the industry trade journal Coal Age, for the years 1912 to 1950. Coal Age is perhaps the best source for documenting the changes in coal technology that occurred during the early part of the twentieth century. Additionally, Coal Age offers a plethora of material on tipple and screening technology, conveyor technology, mining technology, actual and representative illustrations and photographs relating to Nuttallburg, and general information on the various West Virginia coal fields. Information contained in Coal Age formed the basis for the narrative documentation of the equipment and processes used at the Nuttallburg Headhouse and Tipple. Other useful journals include Mines and Minerals, Modern Mining, and The Coal Industry. Another source of pertinent information on coal mining and processing technology and processing equipment are the Keystone Coal Buyers Catalogs and the Keystone Coal Mining Catalogs. In addition to trade journals and catalogs, the historian painstakingly examined every West Virginia Department of Mines Annual Report, from the first 1883 report to the 1960 report (it should be noted that the second annual report was not released until 1895). These mine statistics tracked changes in coal mining technology such as the advent and use of coal cutting machinery, the number of mine locomotives used by a particular mine, or the number of and production from loading machines. In addition to documenting technological trends, the reports give individual mine output statistics for Nuttallburg, as well as county and state coal output.

The historian used archives in West Virginia and Pennsylvania to locate historic maps, photographs and other archival information pertaining to the Nuttallburg Mine site. Archives visited include the West Virginia and Regional History Collection, West Virginia

University, Morgantown, West Virginia; the State Archives, Charleston, West Virginia; Pentree Resources, Princeton, West Virginia; and The Carnegie, Library of Pittsburgh, Science and Technology, and Pennsylvania departments.

Trees Above, with Coal Below, John Nuttall II, proved an excellent source of primary material on the Nuttallburg Mine. Trees is, in fact, the Nuttall family history discussing their early years in the gorge, but also contains pertinent information about the mine's early operation and technology of that period. Additional primary information on John Nuttall's early life and times was gleaned from the unpublished manuscript "The Life of John Nuttall," also by John Nuttall II, made available by the New River Gorge National River Park Library.

The historian made numerous trips to the site to evaluate extant remains and to form speculative opinions about process and the missing equipment. These field examinations, were aided by the recording team, who regularly conversed with local residents about the history and operation of the mine and its various ancillary structures.

The second phase of the recording project was the return to the office and studio to prepare the final documentation package. However, things never go as smoothly as planned, and this was period continuing historical research, locating photographs, and examining mine statistics all while writing the narrative. Likewise, the recording team once in the office and laying out the drawings found it necessary to return to the field for missed measurements and other examinations. The historian often accompanied the recording team into the field for these new measurements hoping to glean new understandings of the processes employed at Nuttallburg.

In the midst of this chaotic period, members of the recording team returned to the field for the formal large format photography of the site's extant remains. The structures were photographed to HAER standards using a 4x5 view camera. The Headhouse, Fan House, Conveyor, Hoist House, Coke Ovens, and Tipple were all documented using this medium.

The Nuttallburg Recording Project, despite many setbacks, it was completed during the late winter of 1992. In the end it was well worth the time and effort to execute and complete this project.

Introduction

The word "revolution" as defined by Crane Briton in his excellent work, The Anatomy of Revolution, means a sudden or striking change. The word revolution also means rotation; this definition implies a return to a point of beginning. Political upheavals follow a pattern with sudden change, resulting in an old regime being replaced by a new one. Briton points out that inevitably there is a counterrevolution and the old or neo-old regime returns to power. For example, witness the American, French and Russian revolutions. All three have the characteristics of the overturning of the government, the emergence of a new order, and the return to the old order. This cycle is very subtle as with the American Revolution, but much more dramatic with both the French and Russian revolutions. Both definitions of revolution apply to these examples; that is, sudden change and a return to a point of beginning.

The cyclical nature of revolutions are also true for industrial revolutions. First, society's reliance on goods from small scale "cottage industries" or outside sources; then the striking change of heavy industrialization resulting in self sufficiency; followed by a period of leveling and decline, often returning to a state of dependence upon outside or foreign goods. This is nowhere more true than in the New River Gorge where the rugged natural beauty suddenly disturbed with the arrival of the Chesapeake and Ohio Railroad and the land manipulated by men and machines to extract and process coal has now returned to its natural state. This succession of events was the result of the Industrial Revolution in the mid-nineteenth century America.

The Industrial Revolution of the eighteenth and nineteenth centuries was the result of certain political, social, and economic factors and conditions that were first met in Great Britain, and later, America. But what underlay this rise to industrial prominence was an abundant source of raw materials, particularly iron and coal.

Historians of technology have argued that Iron Bridge, Coalbrookdale, England was the birthplace of the Industrial Revolution, where in 1709 iron was first smelted using coke, a product of coal. The timber resources of Great Britain had been greatly depleted by the early eighteenth century and a new fuel source for smelting iron was needed. On the other hand, other historians argue that the Industrial Revolution began at Castle Howard in 1712 with the advent of the first practical steam engine. (The Necomen steam engine was coal fired and ironically was first used to pump water from coal mines.) Indeed, the steam engine as the prime mover of the Industrial Revolution was used not only to clear mines of water, but also to power textile looms, operate the bellows for blast furnaces, and provide motive power for steam locomotives. Any practical application of the steam engine

required coal as the basic energy source and large quantities of it. Thus it is clear, from these examples that coal was the key fuel of the Industrial Revolution.

The British Industrial Revolution predates the American Industrial Revolution by approximately one-hundred years. Like its British counterpart, the American Industrial Revolution was kindled by coal. It began during the antebellum years but began flourishing in the decades immediately following the Civil War, bringing America to the world's industrial forefront. The rapid growth of the American iron industry was fueled by the seemingly boundless reserves of the American coal fields. Not only did the iron and steel plants use coal and coke, but coal was also the fuel for steam locomotives that enabled transcontinental trade and settlement. More fundamentally, it heated peoples homes and cooked their meals.

Often, the problem laid not in locating or extracting coal, but rather transporting it to a market. This was certainly the problem in the New River Gorge. It was known from the time of the earliest settlers that coal seams outcropped along the high gorge walls. This coal was mined and used for local purposes, such as heating and smithing. The principal difficulty with exploiting the New River Field was the lack of transportation. This was solved by the construction of the Chesapeake and Ohio Railway during the early 1870s. Perhaps the sudden rise in coal production is most indicative of the C&O Railway's impact on West Virginia's mining history. During the early 1870s, the state's coal production averaged about 650,000 tons annually, however, in 1874, the C&O's first full year of its operation, the state's annual production nearly doubled, with 1,120,000 tons being produced. Indeed, the C&O Railway had a profound effect on the development of the New River Field.

The Nuttallburg Mine Complex is located on the north side of the New River Gorge, in Fayette County, West Virginia. This significant mine site was one of the earliest to operate in the New River Field. The mine was opened in 1873, by John Nuttall, an English immigrant and Pennsylvania capitalist, in anticipation of the C&O Railroad's construction. Nuttall, a self made man in the true style of Sir Samuel Smiles, who believed anyone who worked hard could rise to a prominent position of wealth and responsibility, is the unsung hero of the New River Field. The general histories of the West Virginia Smokeless Coal Fields, identify Colonel Joseph Beury as the pioneering capitalist in the New River Field. Furthermore, the literature invariably credits those who followed Beury, men such as Justus Collins, George Henry and W. Gaston Caperton, and Thomas and William McKell as trailblazing capitalists, but seldom mentions Nuttall. One of the purposes of this paper is to give the credit due to John Nuttall as

a pioneering force in the New River Field.

The Nuttall family maintained ownership of the mine for several decades, but eventually leased the property and mineral rights to outside operators. The most famous operator was Henry Ford, the renowned American automaker, who purchased the leasehold in 1920. It was during the Ford era that the Headhouse, Retarding Conveyor (when constructed, it was considered the longest of its kind), and Tipple were erected, during a period of extensive renovations. Ford hoped to make the mine more productive, and instituted a program of modernization at the mine. Ultimately, this program would only have limited results.

Late in the 1920s, the mine was acquired by the Maryland New River Coal Company, who operated it until 1953. The Garnet Coal Company leased the mine in 1954, and operated it until 1958 when all mining activity ceased.

DRAFT

Part I: The Corporate History of the Nuttallburg Mine Complex

Section 1.1 New River Gorge Introduction

Fayette County Geography

Fayette County is located in the south central section of West Virginia and is bounded by Kanawha, Nicholas and Clay counties to the north; by Nicholas and Greenbrier counties to the east; by Summers and Raleigh to the south; and by Kanawha and Raleigh counties to the west, enclosing a total of 666.5 square miles.¹ The topography of this region features high ridges and plateaus with deep valleys. The elevation of Fayette County varies from 597.7 feet above sea level at Montgomery to 3375 feet above sea level on the crests of Sewell Mountain.²

The New River, the second oldest river in the world (the Nile is considered the oldest), is Fayette County's principal river. With its headwaters high in the Blue Ridge Mountains, the New River flows northwesterly out of North Carolina through Virginia into West Virginia, meandering through the heart of the county. At Gauley Bridge, the New River joins with the Gauley River to form the Great Kanawha River. Fayette County lies entirely within the watershed of the Great Kanawha River, that is, all watercourses in the county ultimately drain into the Great Kanawha basin. The county's principal tributaries of the Great Kanawha are Mann's Creek, Keeney's Creek, Laurel Creek, Mill Creek, Meadow Creek, Wolf Creek, Arbuckle Creek, and Dunloup Creek, draining 326.4 square miles.³ The New River in Fayette County carves a deep gorge that today contains the New River Gorge National River.

Early History of Fayette County

Fayette County was formed on February 28, 1831 from Kanawha, Nicholas, Greenbrier, and Logan counties and was named for the Frenchman and American Revolutionary War hero, General LaFayette. In 1850 Raleigh County was created from part of Fayette and in 1871 another part of Fayette was used to form Summers County. The first county seat was located at New Haven, but was moved to Vandalia. Vandalia was founded by Albert Vandal and was renamed Fayetteville in 1837.⁴

The earliest inhabitants of this mountainous country were Native Americans. The area was primarily used as the hunting grounds of the Delaware, Shawnee, and Mingo tribes. This began to change when, in 1713, the region came under the hegemony of the Iroquois tribe, who were expanding their territory and their domination over other eastern tribes.⁵ The Fayette County region was rugged and isolated, but ultimately European and other white explorers penetrated the mountains, searching for a passageway to

the west.

The first explorers to discover the New River are said to have been Virginian's Thomas Batts, Thomas Wood and Robert Fallam. These men named the New River "Wood's River", in honor of Abraham Wood, an early Virginia explorer. Virginia Colony Governor William Berkeley commissioned these men to explore the Trans-Montaine Region and to find "the ebbing and flowing of ye South Sea or of the water on the other side of ye mountains." In September 1671, the explorers left from near the present day city of Petersburg, Virginia. During the course of their travels, the trio followed the watercourses westward, they crossed the New River and traveled over the mountains to near present day Matewan, West Virginia on the Tug Fork River.⁶ In their month long journey, Wood, Batts, and Fallam were the first non-Native Americans to view the New River, but others that followed would begin to explore and inhabit the Fayette County region.

The region remained virtually unexplored and uninhabited by white settlers for nearly another one hundred years. This began to change in 1748, when the Ohio Company of Virginia was formed to settle the territory drained by tributaries of the Ohio River. This territory included the watersheds of the New and Kanawha rivers. An early traveller to the Ohio Country was North Carolinian Christopher Gist, surveyor, explorer, and sometime companion of George Washington, who in 1750 descended the Ohio River from the Forks of the Ohio to the Falls of the Ohio at present day Louisville, Kentucky. After his return to Tidewater Virginia, Gist was sent back to the Ohio Country in late 1751 to explore the lands between the Monongahela and the Great Kanawha rivers. During the course of his explorations, Gist traveled down the Ohio River to the mouth of the Great Kanawha River (at present day Point Pleasant, West Virginia), venturing up the Great Kanawha River to the New River and further up to the mouth of the Greenbrier River. On his return, Gist explored the lands comprising the modern West Virginia counties of Tyler, Pleasants, Mason, Jackson, and Wood.⁷

It was not until after the Seven Years' (French and Indian) War that the Fayette County region began to be settled. In 1768, William Johnson, Superintendent of Indian Affairs for the British government, negotiated the purchase of the lands bounded by the Allegheny Mountains to the east, the Ohio River to the west, the mouth of the Tennessee River to the south and Kittanning to the north, above the Forks of the Ohio at Fort Pitt. The Treaty of Fort Stanwix, as this land acquisition was known, led to the settling of the lands west of the Alleghenies once held in reserve for the Indians under the dictates of the Royal Proclamation of 1763. (The Royal Proclamation was an unsuccessful decree designed to prohibit settlement west of the Alleghenies, thus reducing the pressure of westward expansion of the tribes in the region and the threat of marauding tribes raiding settlements. However, the

British government had no real control over individuals who entered the region and settled.) After the Treaty of Fort Stanwix was signed, these new lands were settled by veterans of the Seven Years' War, who were granted land patents for their military service.⁸

The veteran landseeker possessing a land warrant could petition the local county surveyor for a tract of land and take possession of the property, or the bearer could trade the patent to another. Also, a person could settle on land as a squatter or under corn title. A squatter simply staked a claim, clearing the land to be farmed and building a cabin. The squatter had no legal right to the land, but could gain title to the property if the original patent was never claimed. A corn title was similar, in that the pioneer cleared the land and planted corn. The planting of corn was recognized as a form of land title. The first patent survey within the bounds of the present Fayette County was granted to Henry Banks for 40,680 acres of land on the New River in 1785. By the time Fayette County was formed in 1831, well over 50 land patents had been granted for Fayette lands. These land grants continued until after the Civil War, totaling over 400 patents being issued.⁹

Fayette County was settled using these practices and by 1840 the county had a population of approximately 3,900. By 1870, its population had nearly doubled to 6,700 and by 1880, the county's population had almost tripled to 11,600 people.¹⁰ The population growth of Fayette County during the 1870s can be attributed to two very important factors: the construction of the Chesapeake and Ohio Railway and the subsequent opening of the New River Coal Fields.

Construction of the Chesapeake and Ohio Railway

Historically, the New River has been a corridor for passage to the west, used as such by both Native Americans and pioneer settlers. George Washington recognized the value of this waterway and in 1784 he planned and surveyed a canal, the James River and Kanawha Canal.¹¹ This canal was to link the tidewater port of Richmond with the Ohio River, and hence to New Orleans via the Mississippi River. When completed, this canal would allow the transportation of finished and raw goods within the backcountry, as well as unifying the young country by connecting the interior with the more established coastal cities. This canal would follow the James River through the Appalachians then following the Greenbrier, the New, the Great Kanawha rivers to the Ohio. This monumental undertaking was to be constructed entirely within the bounds of Virginia. Proposed in 1784, the James River and Kanawha Canal had reached Buchanan, Virginia by 1851, a total of 160 miles. After the mid-1850s, any plans for the completion of the canal to the Ohio River were abandoned, never to be resurrected.¹² The failure

to finish the canal can mostly be attributed to sectionalism and inadequate funding. Because the state failed to adequately fulfill the need for internal improvements, rampant sectionalism would plague western Virginia, causing its inhabitants to feel disenfranchised from the Tidewater government. This disenfranchisement ultimately led to the creation of the State of West Virginia in 1863. While the canal failed to reach the Ohio River, the Virginia legislature did authorize and fund a turnpike to connecting the canal with the Ohio.

In 1821 the Virginia legislature authorized the construction of a road to connect Covington, Virginia (then the western terminus of the canal) with the mouth of the Big Sandy River on the Ohio at present day Huntington, West Virginia. The road, known as the James River and Kanawha Turnpike, or the Kanawha Road was completed in 1826, from Covington to Kanawha Falls (Glen Ferris, West Virginia), and later, in 1827, the road was pushed to a point 26 miles above Charleston. Finally, in 1829 the legislature authorized the completion of the turnpike to the Big Sandy, and it was completed in the same year.¹³

The James River and Kanawha Turnpike was one the earliest roads to be constructed in Fayette County and roughly followed an old Indian Trail called the Buffalo or Kanawha Trail. The turnpike was the focus of activity by both Union and Confederate forces in Fayette County during the Civil War. The Kanawha Road and the New River corridor were the chief highways into the greater Kanawha Valley and thus changed hands many times in the early years of the conflict, with action at Gauley Bridge and others major gaps or crossings.¹⁴ The James River and Kanawha Turnpike served to connect the canal with the Ohio River and was the major transportation artery in western Virginia and later West Virginia until the building of the Chesapeake and Ohio Railway.

Long before the construction of the Chesapeake and Ohio Railway, a plan to construct a railroad connecting the Ohio River and the Atlantic Ocean was proposed by Claudius Crozet, the great Virginia engineer. During the 1830s, Crozet proposed the construction of a railroad to replace the James River and Kanawha Canal then under construction. This was however, the era of canal building mania and his plan was opposed, being ultimately discounted.¹⁵ Crozet was not alone in his dream of building railroads, as Virginia capitalists did construct several railroad lines in the decades before the Civil War, including the Louisa Railroad, the Blue Ridge Railroad, the Covington and Ohio, and the Virginia Central.

The origins of the Chesapeake and Ohio Railway can be traced to 1850 when the Virginia Central Railroad Company was incorporated. The successor to the Lousia Railroad, the Virginia Central was begun in 1850 as an extension line from Chesapeake Bay to the Ohio River. This extension line was chartered as the

Covington and Ohio Railroad. After nearly a decade of construction, work on this line was abandoned in 1861 due to the Civil War. Under new charters of incorporation from both the West Virginia and Virginia legislatures, work was resumed in 1868. The Virginia Central Railway was contracted in August 1868 to finish construction on the railroad, and changed its name to the Chesapeake and Ohio Railway (hereafter C&O) in November 1869. Construction continued and in June 1870, the C&O acquired control of the Blue Ridge Railroad, which had completed a line through the Blue Ridge mountains. Construction of the C&O road was begun in 1869, with construction from both the eastern and western terminuses. It was completed on January 29, 1873, when the final spike was driven at Hawk's Nest Bridge, West Virginia. The C&O's route followed the former right-of-way and proposed route of the James River and Kanawha Canal: over the Alleghanies, through the Greenbrier Valley, down the New River Gorge, along the Great Kanawha, and across Teay's Valley to the Ohio.¹⁶

The earliest settlers of the New River Gorge were aware of the abundance of coal, but had no way of transporting large quantities to market and therefore make a profit. The completion of the C&O Railway created a reason for the previously unexploited coal reserves of the New River Gorge to be mined. Indeed, the C&O offered the perfect transportation infrastructure to ship mined coal to both eastern Tidewater and western markets.

Nothing is more indicative of the impact that the completion of the C&O had than the immediate increase in West Virginia's total coal production for 1874. During the early 1870s state coal production averaged about 600,000 tons annually. However, in 1874 state production nearly doubled with an annual production of 1,120,000 tons. This huge jump in coal production was the direct result of the C&O Railway enabling the exploitation of the New River Field.

The New River Field

John Peter Salley is considered the first person to notice the presence of coal in what is now West Virginia. In 1742, Salley explored the New River region, naming and following the Coal River to its headwaters, noting the abundance of "coals."¹⁷ Salley was not alone in noting the existence of "coals" in West Virginia, since the pioneer settlers who came to the New River Gorge were also well aware of the abundance of coal outcropping along the "Endless Wall" which rims the canyon. Coal was also abundant in the creek hollows of the tributaries of the New River. The coal outcropping in the gorge, the Sewell (named for Sewell Mountain where it was first found) or Nuttall (named for John Nuttall),¹⁸ seam was high quality "smokeless" or "steam" coal, which burned very hot and emitted little smoke. Local settlers and blacksmiths made use of this coal, but extensive underground mining of the coal was not feasible since it offered little or no return on the time and money invested. Thus, not many mines were in operation in the gorge or Fayette County prior to the construction of the C&O. However, the quality of the coal was not going unnoticed.

During the early 1830s, the first scientific evaluations of Appalachian coal reserves were undertaken by Dr. Samuel Hildreth, a Ohioan, who published the results of his explorations in Siliman's Journal of Sciences. This work was followed up in 1836, with a four year study by William Baron Rodgers, at the time Virginia's leading geologist. He analyzed the coal from Fayette County and seven other counties, finding it of the highest quality.¹⁹ It was at this time that the first mines began to open in the New River region.

The earliest mines to operate in Fayette County were Big and Little Sewell, first opened in the 1840s. These mines primarily furnished coal for the Kanawha Valley salt industry and domestic house fuel for Wheeling. During the 1850s, two new mines were opened in Fayette County under the 1854 Virginia act which allowed for the organization of companies for mining and manufacturing reasons (By 1860, there were 25 such companies with charters in western Virginia). The Crescent Coal Company and the Mount Carbon Mining Company were two companies chartered in 1857 for the purpose of mining coal. These two companies attempted to attract foreign investments, but the Civil War disrupted this effort to gain outside capital. Following the war, Fayette County entrepreneurs successfully began attracting overseas investors to develop the New River Field. In particular, British capital was invested at Hawks Nest when Londoner David T. Ansted and former Confederate Colonel John W. Imboden organized the Gauley-Kanawha Coal Company in 1873.²⁰

The first mine to begin operations in the gorge following the Civil War was opened by Colonel Joseph L. Beury, formerly of Schukill County, Pennsylvania, at Quinnimont on Laurel Creek in

1872.²¹ Beury's operation, the New River Coal Company, was the first mine to ship coal on the newly completed C&O Railway in 1873. Buery went on to start more mines in Fayette County, including Fire Creek in 1876 and the Mill Creek Coal and Coke Company in 1884.²² Beury is considered the pioneer operator in the New River Field. Other pioneering men would come to the New River gorge to open mines, including the Caperton's, Justus Collins, and Thomas McKell. These men are well known in the New River Field and rightly so, given the success of their mining operations. One man, however remains fairly anonymous, but had a huge impact on mining in the gorge. This man was John Nuttall.

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Section 1.2 The Evolution of the Nuttallburg Mine Complex

John Nuttall (1817-1897)

Born in the city of Accrington, Lancashire County, England on April 9, 1817, John Nuttall was the fifth of six children. His father, Thomas, was a weaver. Nuttall following his father's footsteps, entered the textile trade at the age of eight as a tierboy²³ in a calico print works. At eleven, he entered the coal mines at Goodshaw, and when seventeen, he returned to the print works to become an apprentice. After three years, Nuttall tired of the textile industry and returned to the mines, where he worked for the next 12 years. John Nuttall emigrated to America in 1849, leaving his wife Elizabeth, and their three children, Alice Elizabeth, Suzanna, and Thomas behind in England.²⁴

Nuttall arrived in New York City in May 1849. Before emigrating to America, he secured employment with Crabtree and Wilkerson, a silk mill on Staten Island. This mill was operated by his wife's brothers, Jonathan and William Crabtree. In 1850, Nuttall's wife and children emigrated to New York, joining him on Staten Island. Nuttall worked at the silk mill for seven years, where, according to family legend, he had earned enough money to pursue opening his own coal mine.²⁵

In 1856, Nuttall learned of the Tyrone and Clearfield Railways (later the Tyrone and Clearfield Branch of the Pennsylvania Railroad) construction in central Pennsylvania in the four county area of Blair, Cambria, Centre, and Clearfield counties. The rail line was being constructed from Tyrone in Blair County through Philipsburg in Centre County and terminating at Clearfield in Clearfield County.²⁶ The purpose of this road was to exploit the timber and coal resources in the mountains along the railroad's route. Nuttall first investigated the proposed right-of-way, learning of a coal seam located on the Colburn Farmstead, about ten miles northeast of Tyrone. Satisfied with the quality of the coal from this seam²⁷, Nuttall convinced his brothers-in-law Jonathan and William Crabtree to finance his operation. They lent him enough money to acquire 200 acres of land and to fully equip his mine. Thoroughly funded, Nuttall then built Nuttallville, establishing a store and houses and equipping his mine with all the necessary timbers, mules, rails, and mine cars. Reportedly the Nuttallville Mine had the distinction of being the first mine to ship coal on the Tyrone and Clearfield line when it reached the village in 1862. Robert Powell purchased half interest in the mine in 1862 enabling Nuttall to increase the mine's production to 4,000 tons per month. Additionally, Nuttall earned a \$0.05 per ton royalty on the coal mined at Nuttallville. Nuttall was very pleased with the royalty arrangement, and changed the village's name from Nuttallville to Powelton. In 1866, Powell bought out Nuttall's interest in the mine, thereby gaining complete control of the mine.²⁸

Nuttall reinvested the money from the Nuttallville Mine to establish a new mine on Coal Run near Osceola Mills, Clearfield County, Pennsylvania, located approximately five miles west of Powelton. He named the new mine Decatur because it was located in Decatur Township. This mine, however was not successful, failing because the coal seam would dip and disappear, requiring great expense and labor to relocate it. Undaunted, Nuttall established yet another mine in 1867 or 1868, this time in Clearfield County on a 1,200 acre tract along Moshannon Creek²⁹, across from Philipsburg. He named this new mine Decatur No. 1. Again, Nuttall established a village with a school and store. The village was officially named Decatur, but was known locally as Nuttall Blocks. This mine was very profitable, enabling Nuttall to invest in another mine. He named this mine Decatur No. 2. Buoyed with the success of these two mines, Nuttall established two more mines: Laurel Run No. 1 and No. 2.³⁰ Apparently, both of these mines were leaseholds with the mine properties owned by Richard Hughes and John Shaw.³¹ This flurry of mining activity occurred in the space of about ten years, setting the stage for the development of a mine in the New River Gorge.

Nuttall's move to West Virginia to establish the Nuttallburg Mine opened the last chapter of his life. The next thirty years, clearly better than one-third of his life, would be spent in the New River Gorge. Whether it was the challenge of mining in the gorge or its rugged natural beauty, Nuttall finished his life there. John Nuttall passed away on September 15, 1897 and was buried in the Nuttall cemetery overlooking the mine he created.

Nuttall Family Era 1873-1900

In the spring of 1870, the 53 year old Nuttall reportedly read a newspaper account of the construction of the C&O Railway through the New River Gorge. Among the details in the article was information about the availability of coal along the route of railroad, particularly in Fayette and Kanawha counties. Nuttall was intrigued with the possibilities of opening yet another mine, this time in West Virginia. Leaving sons-in-law, George McGaffery and John Todd in charge of his Pennsylvania holdings, Nuttall traveled to eastern Virginia to begin a stagecoach journey west over the James River and Kanawha Turnpike bound for the Kanawha County coal fields.³² After two days travel, he arrived at Cooper's Tavern at Locust Lane, Fayette County, near the headwaters of Keeney's Creek (probably in the Lookout vicinity). While lodging at the tavern, Nuttall observed coal being burned in a fireplace. This surprised him. Nuttall examined a lump of the coal, noting its superior quality and inquired about the source of the coal. He was told it was mined from an outcropping along Keeney's Creek, a tributary of the New River. Nuttall had a chance meeting at the tavern with J.L. Blume, the local surveyor. Blume furnished Nuttall with information about the availability of local

property and its costs. Blume also told Nuttall that there were three and one-half and four-foot seams of coal outcropping both at Keeney's Creek and at the cliffs below the rim of the gorge. Possessing this information, he decided to investigate the northern side of the New River Gorge.³³

Nuttall's field investigations revealed a four-foot seam of coal located about 200 feet below the canyon rim in the sandstone cliffs along Short Creek, a tributary of the New River, located about one mile below Keeney's Creek. It was here that Nuttall decided he wanted to establish his mine.³⁴ To this end, Nuttall started purchasing property in Fayette County in November 1870, first acquiring 657 acres from R.M. Holliday. After this initial Fayette County land purchase, Nuttall returned to Pennsylvania with samples of coal, which he had analyzed at Philadelphia. These tests revealed the coal to be of a much higher quality than the coal being mined at his Pennsylvania mines.³⁵ Fully funded with Pennsylvania capital, Nuttall returned to Fayette County and over the course of December 1870, he purchased property along Keeney's Creek, the New River, and the cliffs of the New River. Much of this property was purchased from the Blume family, with other acreage purchased from the Alderson and Cavendish families.³⁶

It is unclear where Nuttall lived during the next several years. Perhaps he traveled back to his Pennsylvania mines; perhaps he stayed in West Virginia, but clearly he made several more land acquisitions during the years 1870 to 1873. In late June 1873, Nuttall purchased three tracts of land "situated on the waters of the New River containing 600 acres..." from Jacob Blume for the sum of \$6,600. The first tract, containing 179 acres, was located on the east and west sides of Short Creek. The second tract of 295 acres contained land from the New River to the canyon rim, while the third tract of 126 acres was located on Ferrin (Fern) Spring Run.³⁷ These three adjacent tracts were the core lands on which he established the village of Nuttallburg. With these acquisitions, Nuttall now had the necessary land, mineral rights and the transportation infrastructure to ship coal. However he still lacked a working mine.

Nuttall evidently began working on the mine site in 1870, bringing William H. Holland from his Pennsylvania mines as his mine boss. Spending the next 18 months, they readied the Keeney's Creek mine. But Nuttall still had to wait for the C&O railroad to be completed so the mine could be equipped with rails, monitor cars, and other heavy equipment. This equipment could only be delivered by the C&O railroad due to the ruggedness of the terrain.

The Keeney's Creek mine was planned to have a production of 250 tons per day. Nuttall decided to open a second mine on Short Creek with a planned capacity of 500 tons per day. He named it the Nuttallburg Mine. The Keeney's Creek mine was ready to ship coal on the C&O when the line was completed in February 1873. This mine

was the second New River mine to ship coal out of the gorge.³⁸ By late 1873 or early 1874, Nuttall had erected at the two mine sites 17 two-family dwellings, 80 one-family dwellings, acquired 220 mine cars, purchased 30 mine mules, built 80 coke ovens, and four 2-car monitors. Additionally, the Nuttallburg mine had a Scalehouse and scales, a Drumhouse or Headhouse, a Blacksmith Shop, a Carpenter Shop, Slate Dump, and a Tipple. (This Tipple's location must have been too far from the main stem, because at some point in the late 1870s, he built a new Tipple on the Nuttallburg siding adjacent to the C&O mainline.) The combined employment at the mine was 120 miners, 25 drivers, 40 trappers and bricklayers inside, 20 outside men, and 30 coke drawers.³⁹ Once Nuttall had finished the village and mine, he was ready to begin operations.

In 1882, the Nuttallburg Coal and Coke Company was formed, superseding the earlier Nuttallburg Coal Company. Nuttall had been buying Fayette County land on a regular basis, evidently purchasing any land offered him. These repeated land acquisitions must have left Nuttall land-rich and cash-poor, as he created the new company to generate money through both royalties and a leasehold to defray his debts. This new company was formed of an equal partnership of Jackson Taylor, company bookkeeper and husband of Martha Nuttall; William Holland, Nuttallburg's mine boss; Lawrence Nuttall, John Nuttall's son; and Nuttall himself. The company created a leasehold on the Nuttallburg and Keeney's Creek mine properties, with the lessee (apparently the other partners) paying the elder Nuttall royalties of \$0.10 per ton of coal mined and an additional royalty of \$0.02 per ton for the following twenty years to defray the costs of constructing the mine and village. However, Nuttall canceled the debt in 1894, believing he had received enough compensation for the debt.⁴⁰ By the mid-1890s, Nuttallburg was at the center of a tremendous amount of mining activity along Keeney's Creek, as it was a major C&O siding for coal mined up the Keeney's Creek hollow.

In the late 1880s, Nuttall found it advantageous to construct a branch line of the C&O up Keeney's Creek. This would serve two purposes: first, this branch line would better serve his existing mines at Nuttallburg and Keeney's Creek; and second, Nuttall believed that seven more mines could be opened in the Keeney's Creek hollow, if there was some way to transport the mined coal down to the C&O mainline. To this end, Nuttall surveyed the route and he believed that such a road could be constructed. He approached the C&O Railway to build his branch line, but they claimed it could not be built since the hollow was too rugged and steep. Nuttall prevailed and the C&O engineers surveyed the route, concluding the branch line could indeed be built. Nuttall even offered to donate \$100,000 towards constructing the line. However, A.A. Low of the Low Moor Iron Company of Low Moor, Virginia had recently purchased tracts of land on the south side of the gorge and wanted to exploit the coal reserves (the future Kaymoor Mines).

Low, a member of the C&O Board of Directors, wanted a second line to be built on the south side of the gorge. This was also agreeable to the C&O, since the north side tracks were often subjected to rock slides, which closed traffic on the mainline. Unfortunately, the C&O could not afford both expansions, electing to construct the second line on the south side of the gorge. Disappointed but undaunted, Nuttall offered to pay for the entire branch line's construction up Keeney's Creek and the C&O ownership accepted the offer. They also agreed to maintain the branch line, and gave Nuttall's anticipated mines free freight on board for coal conveyed.⁴¹ In June 1891, the C&O was contracted to construct the branch line from Nuttall Station to the headwaters of Keeney's Creek near Lookout. In 1893, the line was completed five miles to the mines at Rothwell, and in 1903 the line was completed the last two miles to Lookout. The Keeney's Creek Branch of the C&O Railroad had a length of 7.8 miles with two switchbacks and five trestles overcoming 1,206 feet in elevation.⁴² The construction of the Keeney's Creek Branch typifies the kind of engineering accomplishments performed in the New River Gorge, both in railroading and mining, where unique solutions were required to overcome the terrain and change in elevation.

Despite Nuttall's promises to underwrite the Keeney's Creek Branch's construction; he was unable to completely finance it (it would have bankrupted him), and consequently he was unable to open the new mines he had envisioned. Apparently there were no lack of coal operators who had the necessary capital to open the proposed Keeney's Creek mines. Instead, Nuttall offered first-choice leaseholds to his employees and friends. William Holland and Fred Rothwell purchased leaseholds and established mines along the branch lines route in anticipation of the railroad. They agreed to pay Nuttall a \$0.10 per ton royalty on the coal mined and pay him \$0.05 per ton shipping fee for transporting the coal down Keeney's Creek. The sale of these leases helped to finance the branch line.⁴³ Other capitalists were granted second-choice leaseholds and also opened mines along the branch's right-of-way. The mines opened by Holland, Rothwell and the others would form the future holdings of the Maryland New River Coal Company.

An Era of Change: 1900-1920

Mining activity in the New River Gorge was increasing at the turn of the century. New mines like the Low Moor Iron Company's Kaymoor Mines, were opened to meet the demands of American industry. Additionally, society was changing with the advent of inventions such as the automobile, the airplane, the incandescent light bulb, the telephone, and a host of other inventions that affected everyday life.

The corporate world was also in a state of flux with the advent of "Big Business". That is, the rise of controlling and

acquisition of raw materials, resources, and services required in manufacturing processes, resulting in control over the market price of finished products. For example, Andrew Carnegie bought steel mills and bridge fabricating companies, consolidating them under one management system that formed corporations such as the United States Steel Corporation and the American Bridge Company, or the Pennsylvania Railroad's acquisition of controlling interest in many eastern railroads.

The New River Gorge was still isolated at the turn of the century. However, the rapidly-changing world impacted mine management practices in the gorge. These changes were also felt at Nuttallburg. In June 1903, the Nuttallburg Coal and Coke Company, (a partnership of Lawrence Nuttall, G.W. McGaffey, Jackson Taylor, Martha Taylor, E.A. McGaffey, K.D. Nuttall, and Suzanna Todd), was deeded to the "Nuttallburg Coal and Coke Company, a corporation..." for the sum of \$100,000. All property, equipment, and goods were situated at the Keeney's Creek and Nuttallburg mines. (For the complete description of property deeded, see appendix I.) Additionally, the Nuttallburg Coal and Coke Company,

...the said lessors do hereby demise, let and lease for coal mining and coke manufacturing purposes to the said lessee, the exclusive right and privilege to mine and carry away all the coal in and from the seams within, under and upon the lands and premises hereafter described, to manufacture and sell coke thereon and there from for such period of time as may be necessary, with the exercise of reasonable diligence, to remove all workable coal from the following boundary of land situate in the Nuttall District in Fayette County, West Virginia...containing 4,160 acres.⁴⁴

In addition to the above rights, the lease also contained covenants which granted timber, water, stone and other surface rights to the lessee for \$6,000 per year per vein of coal mined. Apparently the Nuttallburg Coal and Coke Company was incorporated as part of the settlement of John Nuttall's estate. This company operated until 1908.

In October 1908, the Nuttallburg Coal and Coke Company leasehold was sold and the company's name changed to the Nuttallburg Collieries Company. This name change reflects the trend of other coal companies in the New River Gorge, such as the Collins Colliery Company headquartered at Glen Jean. The leasehold was sold for the sum of \$178,000.⁴⁵ The success of this venture was limited at best. From 1908 to 1909 the mine's annual production increased and more miners were hired, but from 1909 to 1912 the mine's annual production declined and then leveled off (See Appendix II). Ironically, Fayette County's annual production increased over the same period, implying that the Nuttallburg Mine was not very productive or, perhaps more importantly, not very profitable. The lack of the mine's profitability was confirmed in

March 1912, when the Nuttallburg Collieries Company was adjudged bankrupt by the District Court of the United States for the Southern District of West Virginia located at Charleston. The court assigned the Kanawha Banking and Trust Company as the trustee for the Nuttallburg Collieries Company, and it was sold at public auction April 1912 to William E. Deegans⁴⁶ for the sum of \$138,000. Assets included all of the mining equipment, office furnishings, conveying equipment and processing equipment, as well as the leasehold.⁴⁷ The sale resulted in the formation of the Nuttallburg Smokeless Fuel Company, which was chartered by Deegans and other entrepreneurs with a stock capitalization of \$125,000.⁴⁸ Again, this new company's name, "smokeless," reflected the general trend of coal companies operating in the gorge at this time. The New River Smokeless Coal Company and the Smokeless Coal Company had corporate names which clearly reflected the type of coal they mined and marketed; coal that burned at a very high temperature and emitted very little smoke.

The success of the Nuttallburg Smokeless Fuel Company is difficult to measure, as annual production fluctuated from 40,190 tons in 1914 to 59,375 tons in 1916, and back down to 47,593 tons in 1918 (See Appendix II). Apparently, no new technological improvements were introduced at the Nuttallburg Mine, although the company increased the number of mining machines from two machines to five machines in 1913, and six machines in 1915. The Nuttallburg Smokeless Fuel Company was acquired by the Ford Motor Company's coal interests during the summer of 1920.⁴⁹ The acquisition of the mine by Henry Ford ushered in a new era, wrought by changes and improvements in the technology employed at the Nuttallburg Mine.

Ford Era: 1920-1928

The 1920s were an era of expansion for the Ford empire. Vertical integration was Ford's ultimate goal, as he attempted to gain control of not only coal mines, but over transportation as well. In the years following World War I, Ford acquired control of the Detroit, Toledo and Ironton Railroad. He extended the line from Detroit to his River Rouge, Michigan plant, ultimately planning to extend it from Ironton, Ohio, into the Kentucky and West Virginia coal fields. Ford built the lake freighters "Henry Ford II" and "Benson Ford" to ship ore on the Great Lakes; these freighters could dock at the River Rouge Automobile Plant with its mile-long dock frontage.⁵⁰ Henry Ford's hallmark during the 1920s, was gaining control over raw materials and transportation facilities, and improvement of production and productivity at his mines and plants.

The Nuttallburg Smokeless Fuel Company was purchased by Henry Ford's coal interests in 1920. Ford acquired the mine because he wanted a captive mine to supply high-quality steam coal for his

River Rouge Automobile Plant. This plant was completely integrated with blast furnaces, coke ovens, a foundry, machine shops, a glass works, and many other shops related to the manufacture of parts and materials used in the assembly of automobiles.⁵¹

Ford not only wanted to control the market price of coal used by River Rouge and his other subsidiaries; he also wanted to circumvent the stockpiling of steam coal by the United States Navy (the US Navy favored New River coal because of its smokeless characteristics), the prevailing problem facing the major consumers of coal following the First World War. It was to this end that the Ford coal interests purchased the Nuttallburg Mine leasehold and approximately 4,000 acres of coal reserves in the summer of 1920. Ford had been interested in buying coal properties for several years. Reportedly he purchased tracts at Marmet in Kanawha County in 1918.⁵² Ultimately, Ford purchased mine properties in both Kentucky and West Virginia, including the Twin Branch properties in the Pocahontas Field and the Pond Creek properties in the Tug Fork District. Ford's purchase of the Nuttallburg Mine began a bizarre series of events and business decisions relating to the mine site.

Henry Ford, a former mechanic, visited the Nuttallburg Mine in October 1921, wanting to inspect its operations firsthand. He arrived at Nuttallburg in a private railroad coach which was placed on the Nuttallburg siding. Ford then toured the mine, crawling on his hands and knees to reach the workings, and offered suggestions to the miners on improvements. Ford was always interested in his employees welfare and he took this opportunity⁵³ to gain firsthand knowledge by visiting their homes and schools.

The Fayette Tribune account of Ford's visit notes that the Nuttallburg Mine was mostly abandoned due to the expense of extracting the coal. And indeed, after his visit, Ford closed the mine from October 1921 to November 1922.⁵⁴ Why did Ford close the mine? Reportedly Ford felt the mine was not very profitable in relation to the cost per ton of Nuttallburg coal and the market price of coal. Perhaps he wanted to curtail any union activities at the mine by closing it and then being able hire non-union miners at his own wage scale when he reopened the mine. More fundamentally why, then, did Ford buy this particular mine? There is no record what the Ford coal interests paid for Nuttallburg, but it probably did not command a very high price. So the answer may well be that Ford thought he could modernize the mine to a point that it could be made productive, since it cost so little. But, Ford's actions relating to his decisions to improve the mine were - circuitous at best. This is demonstrated by the following account of the events surrounding his decision to infuse a large amount of money into the mining operation.

In October 1922, Coal Age, an industry trade journal, reported that Ford had closed down and was dismantling the Nuttallburg Mine site.⁵⁵ This may have been the result of his trip to the mine the

previous year. Furthermore, in early November 1922, Coal Age reported that Ford was willing to sell the mine to the Maryland New River Coal Company, the owner's of all the mines adjacent to the Nuttallburg Mine along Keeney's Creek. This sale was never transacted.⁵⁶ However, in late November the events took a bizarre turn when Coal Age reported that a temporary injunction had been granted against the Maryland New River Coal Company, preventing them from removing certain mine barriers which separated the Keeney's Creek Mine from the Nuttallburg Mine. Apparently Maryland New River wanted to drain the Keeney's Creek Mine by flooding the Nuttallburg Mine.⁵⁷ By the end of December 1922, Ford had completely changed his mind about the mine, deciding to resume operations at the Nuttallburg Mine. This change of heart would soon result in a series of capital improvements at the mine, evidently directed at improving production and profitability.⁵⁸ Apparently, Ford's motivation to close the Nuttallburg Mine was rooted in his recent acquisition of the Dexter-Carter Pocahontas Coal Company property at Twin Branch, West Virginia in October 1922 and in his belief that the Nuttallburg Mine was not able to compete with the other mines in the New River Field (in terms of the net cost of per ton).⁵⁹ In the course of two months, Ford had changed his plans for Nuttallburg completely, and in 1923 he would initiate new development plans.

The new year of 1923 brought many new plans for improving the Nuttallburg Mine. These improvements were geared to increasing Nuttallburg's output and thereby making the mine more competitive with the other mines in the New River Field. There were many changes forthcoming, starting from the top down with a major corporate realignment. This corporate realignment made a big splash, and was featured on the front page of February 10, 1923 The New York Times. Indeed, Ford's foray into mining was closely followed by the media with extensive coverage in newspapers and industry trade journals.

The creation of the Fordson Coal Company in February 1923 consolidated all of his coal interests in West Virginia and Kentucky under one managerial umbrella. Ford's son, Edsel headed this new corporation, hence the name Fordson (Edsel Ford also headed the Fordson Tractor Company). Headquartered at Stone, Pike County, Kentucky, the Fordson Coal Company was incorporated at Dover, Delaware and was capitalized with \$15,000,000 worth of stock. Ford, believing that the market price of coal was artificially set by the operators, planned to sell any excess Fordson coal on the open market at a price that would undercut the prevailing market price (Ford never did offer coal on the market or sell it at a below market price).⁶⁰ Shortly after the formation of the Fordson Coal Company, the capital improvement plan was initiated for the Nuttallburg Mine.

The first of the renovations at Nuttallburg was the awarding of a contract for the construction of several hundred new mine

cars. The contract was let to the Cumberland Iron Works of Huntington, West Virginia in February 1923. Coal Age reports that at Nuttallburg "...new machinery is being installed throughout."⁶¹ In this brief notice was the first harbinger of the improvements yet to come at Nuttallburg.

In November 1923, the Fordson Coal Company announced that a contract had been let to the Roberts and Schaefer Company of Chicago, Illinois, for the construction of a new steel Tipple at Nuttallburg.⁶² The equipment contracted for installation featured "Marcus" Screens and RandS Shaker Type Loading Booms. The "Marcus" Screens were a German design for horizontal vibrating screens, and Roberts and Schaefer held the American patent rights for its design and manufacture. The RandS Shaker Type Loading Booms were a combination shaker screen and loading boom which sorted the coal and loaded it in a combined process.⁶³ The new Tipple at Nuttallburg was the first of several Fordson contracts let during 1924 to Roberts and Schaefer for new tipple construction (an additional six new steel tipples were contracted for construction at the Twin Branch and Pond Creek properties).⁶⁴ The Nuttallburg Tipple contract was let in the late fall of 1923, and presumably it was completed by late 1924. This new Tipple was used in conjunction with the existing Monitor Car System and Headhouse installed by Nuttall for another year until Fordson decided to upgrade the old Monitor and Headhouse with new equipment.

Fordson announced in November 1925 that it had contracted with Fairmont Mining Machinery Company of Fairmont, West Virginia for the construction of a Retarding or "Button and Rope" Conveyor and a new steel Headhouse. The Headhouse contract was let for \$55,000, with a completion date set for March 1, 1926.⁶⁵ However, this completion date was not met because it was announced the mine would suspend operations in mid-April 1926 to finish installing the Conveyor. After further delays it was announced at the end of April that the Conveyor installation would be completed within six weeks. The 1,385 foot conveyor, one of the longest ever installed, was reported to have cost \$100,000, a healthy sum of money for the pre-depression years.⁶⁶ Other new equipment to be installed included an automatic car stop and feeder for the crossover dump at the Headhouse and a synchronous-converter Substation. The Substation was constructed on the bench level adjacent to the mine opening and was used to convert commercial high voltage current to a lower voltage current used to operate mine equipment.⁶⁷ Early in the summer of 1926 the installation of the Headhouse and Conveyor was completed with operations resuming thereafter at Nuttallburg. This construction was a turnkey operation and its completion marked the end of the Fordson Coal Company's improvements at the Nuttallburg Mine.

In the final analysis, Fordson spent close to \$300,000 on these improvements and production increased twofold, but Henry Ford never really considered this mine to be very competitive or

profitable when compared with other New River mines such as Kaymoor (in general, Kaymoor outproduced Nuttallburg three to one) or his other mine operations. (See Appendix III for a comparison of Nuttallburg and Twin Branch's production.) The Fordson Coal Company sold the mine to the Maryland New River Coal Company in the summer of 1928. The sale of the Nuttallburg Mine marks the end of Ford's period of experimentation with the mine, as he was never able to precisely decide the mine's role in his vast industrial empire.

Maryland New River Era: 1928-1953

The Maryland New River Coal Company purchased the Nuttallburg Mine leasehold in July 1928 for the sum of \$5.00 and "other special considerations." The Fordson Coal Company divested itself all of its holdings at the Nuttallburg and this included "all livestock, equipment, plant, machinery, and all other personal property...Situated on said real estate or leased premises...used in connection with their mining operations..." Additionally, Maryland New River assumed all of the contracts let by the Fordson Coal Company between the C&O and other companies.⁶⁸

The Maryland New River Coal Company, headquartered in Philadelphia, Pennsylvania, advertised their coal as "Dubree" New River Smokeless Coal. Maryland New River used the Maryland Coal and Coke Company as their "exclusive selling agents."⁶⁹ Maryland New River made available all grades of coal including lump, egg, stove, pea, nut, slack, and run of mine.⁷⁰ Presumably Nuttallburg coal was sold for coke making, power plants and other industrial uses; and small scale operations such smithing and remelting pig iron and other metals at foundries for castings.

In 1928, the Maryland New River Coal Company renamed the Nuttallburg Mine "Dubree No. 4." It became the sibling mine to Maryland New River's four other mines renamed that year: Dubree No. 1, 2, 3, and later 5, which were formerly known as (no order) Boone, Rosedale, Smokeless, and Dubree. These mines were located along Keeney's Creek near the village of Winona, and were established along Keeney's Creek following construction of the Keeney's Creek Branch in the 1890s, many by Nuttall's lessee's. Two of the first properties acquired by Maryland New River in 1917 were the Boone and Smokeless mines owned by the Keeney's Creek Collieries.⁷¹ The other mines, Rosedale and Dubree, were acquired prior to 1922.⁷² Collectively, these mines were ones opened by Nuttall's friends and employees following the construction of the Keeney's Creek Branch.

Through the years, Dubree No. 4's output fluctuated, sometimes leading, sometimes equalling and sometimes producing less than the other Maryland New River mines due to changes in the market, the Great Depression, and World War II (See Appendix II).

Interestingly, Nuttallburg's coal production peaked in 1929, the first full year of Maryland New River ownership with 171,125 tons being produced. In general, coal production at Dubree No. 4 increased under Maryland New River management. This can be accounted for in two ways: the advent of mechanized coal production, and the opening of new mine portals to the west along the bench. It is unclear just how many portals were used by the various Nuttallburg companies prior to this expansion, but field observations suggest that minimally five new mine openings were opened at the site. These openings were probably driven in search of a thicker seam, as well as to increase output.

In 1952, Maryland New River modified the Tipple, adding a Belknap Chloride Washer (used to wash the coal and make it more marketable) and presumably removing the original Marcus screens. Additionally, new timber construction was added on the downstream end to house and support the Belknap Washer. This equipment may have been installed by the Kanawha Manufacturing Company, Charleston, West Virginia, but this is only speculative.

Garnet Coal Company Era: 1954-58

Dubree No. 4 remained operated by the Maryland New River Coal Company until 1953 when it was closed. In 1954 the mine was leased to the Margie Coal Company of Beckley, West Virginia. Apparently Margie Coal mined little or no coal and the mine was leased later that year to the Garnet Coal Company.⁷³ During Garnet's first year of production, the mine produced 25,469 tons, but output fell to a record low in 1958, with 4,702 tons being mined. (See Appendix II) Falling production coupled with a record low number of miners employed, (See Appendix V) apparently forced the closure of the mine in 1958.

Garnet Coal may have operated the mine as a "dog hole" or "gang" mine that employed local miners to extract coal. These mining activities probably resulted in the pulling of pillars left to support the mine roof, a very dangerous activity which left the mine roof in a unstable condition. However, the robbing of pillars was very common in old mines that had been worked out. It is unknown how this coal was taken to market and to what market this coal was shipped. Perhaps the conveyor was still operating, or trucks or wagons were brought onto the bench to convey the coal away. The market may well have been for local use as house coal.

The Town of Nuttallburg

John Nuttall founded the village of Nuttallburg in 1873-74. John Nuttall's grandson, John Nuttall II, writes in Trees Above with Coal Below that his grandfather constructed upwards of 110 dwellings for his miners at the Nuttallburg and Keeney's Creek

mines. Given that the Keeney's Creek mine was a smaller operation, it follows that the majority of these 110 dwellings, probably 75 to 85 houses were constructed at Nuttallburg. The 1883 West Virginia mine report notes that 81 miners, track layers, drivers, outside men and others were employed at the mine.⁷⁴ The majority of these workers and their families would have lived at the village of Nuttallburg. The Nuttallburg post office was established in 1893.⁷⁵

Incidentally, the United States Post Office cited the town as Nuttallburg, but the C&O manifests listed the town as Nuttall or Nuttall Station. Nuttallburg workers not only lived in the gorge, but also on the canyon rim. The canyon rim settlement was known as Nuttall Mountain until a post office was established there and the town was renamed Edmund, for Eddie Ryan, son of John Ryan, the man responsible for establishing the post office.⁷⁶

The village of Nuttallburg grew into a town as the mine prospered and more dwellings were constructed, some more substantial than others. A 1903 inventory of the Nuttallburg Mine property (see Appendix I) shows a total of 75 dwellings (single and double), including the residences of the mine boss and doctor in Nuttallburg. The inventory also lists three homes on the canyon rim. Other structures are related to the operation of the mine, such as a Powder House, Store House, Tipple, Headhouse and so forth are also inventoried.⁷⁷ Undoubtedly, by the turn of the century, Nuttallburg was a flourishing New River community.

A Maryland New River Coal Company map of Nuttallburg dated July 10,⁷⁸ 1922, shows a total of 73 numbered houses at Nuttallburg bottom. The town of Nuttallburg was segregated with two Baptist churches with separate white and black congregations, separate black and white schools, and segregated club houses. Other buildings at Nuttallburg included the C&O Depot, a Powder House, Powerhouse, Barns, and Company Store. Additionally, the town had a fire hydrant system with a water tank to supply water to fight fires. The Nuttall family had a house at Nuttallburg, as did the Taylor and Holland families, two of the other prominent families associated with the founding and operating of the mine. Naturally, these buildings were commanding structures which dominated the diminutive miners' homes at Nuttallburg.

A typical miner's house at Nuttallburg was a one-story, four room structure, with a kitchen, dining room, and two bedrooms. Other houses were two-storied, with three rooms downstairs and two rooms up (presumably with a kitchen, dining area, and bedroom on the first floor, with two bedrooms on the second floor). These houses were very cheap and roughly constructed with very few amenities, which was characteristic of company housing of the period. Many of the inhabitants had gardens behind their homes, growing beans, onions, and other vegetables, while other Nuttallburgers kept pigs and other animals. During the Ford era,

no new houses were constructed, but Ford spruced up Nuttallburg housing with new paint and even whitewashed the rocks. Apparently, Ford also built a wooden garage at Nuttallburg for employees with automobiles.⁷⁹

The miners and their families who lived at Nuttallburg were ordinary people, mostly of English and Afro-American descent. There was segregation in the mines with blacks and whites working in the same section with blacks having a lower level of responsibility. Additionally, the religious, social, and educational institutions were also segregated. The miners work schedule varied in the early part of the twentieth century due to car shortages. Miners often worked only four or five days a week. This changed in the 1930s when mechanization began to structure the miner's job into a six-day week with Sundays off.

The secluded nature of the New River Gorge precluded many of the social and cultural events which we take for granted today. There was a baseball field in Nuttallburg and club houses for socializing, but little else. However, the C&O offered excursions to Cincinnati and other cities for baseball games and other cultural events. Since Nuttallburg was a company town, there were no bars or taverns, but the local inhabitants gambled, made moonshine in the cliffs above the town, and brewed their own beer as part of their recreational activities.

The town of Nuttallburg slowly declined following World War II. The mine was almost worked out, as was the New River Field. Young people no longer wanted to stay in the rural isolated setting of the New River Gorge, desiring instead to move to urban areas in search of work and a better life. By the mid 1950s, the post office for Dubree No. 4 moved to Winona and the town was slowly being abandoned. The Nuttall Depot was retired in 1962 by the C&O. Once the mine closed for good, the town of Nuttallburg virtually became a ghost town, with the wooden dwellings moldering back to nature. Today, only the steel Headhouse, Conveyor, Tipple, and a few structures made of stone or concrete remain in mute testimony to the once thriving New River Gorge community.

Part II: The Technology of the Nuttallburg Mine Complex

Section 2.1 Introduction

The following sections address the technology employed at Nuttallburg Mine Complex that was employed to extract, convey and process coal. In particular, this part of the narrative focuses on the specific types of technology utilized both underground and aboveground at Nuttallburg and how this technology changed over the course of the mine's operations. A thematic approach has been taken here, beginning underground, discussing the extraction of coal, and progressing as the coal did from the Headhouse down to the Tipple, with discussions about Refuse and Coking. These discussions center on the evolution of mining technology at the site. The additional sections that follow address other important aspects of the mine site including above and below ground transportation, and other topics. A thematic approach was used so that any aspect of the mines operation could be examined individually without necessarily reading the entire narrative or taken as a whole.

At the beginning of each section is an introductory passage intended to give a general overview and descriptive explanation of the process, type of equipment, or structure being discussed. This is intended again to help familiarize the reader with the general functions of coal mining technology.

The following general discussion is intended to introduce the reader to the overall movement of coal at the Nuttallburg Mine Complex. This discussion should be kept in the reader's mind while reading Part II of the narrative.

The coal was first mined and then loaded into mine cars. The loaded mine cars were gathered in the mine and hauled to the Headhouse. Here, they were first weighed and then the coal was dumped into a hopper which fed onto the Retarding Conveyor. The Conveyor then transported the coal down the gorge to the Tipple. At the Tipple the coal was processed by sorting the coal into the various sizes and grades. Once sized, the coal was loaded into waiting hopper cars on the railroad tracks beneath the Tipple or transported to the coke ovens for coking.

One last important item: when the Fordson Coal Company's program for modernizing the mine was completed in 1926, virtually all vestiges of the original Nuttall constructed equipment and structures were removed.

Section 2.2 Extracting, Conveying, and Processing Coal

Underground Mining

In coal mining operations, there are four entry methods to gain access to coal seams: strip mining, deep or shaft mining; slope mining; and drift mining. In strip mining the overburden or earth is removed by bulldozer, or other earthmoving equipment to reveal the coal seam. The coal is then extracted by blasting, conveyed to the preparation plant for processing, and shipped to market. In shaft mining, the mine entry is driven from the surface vertically to the coal seam. The coal is mined deep within the ground using conventional mining methods, and is brought to the surface for processing. The slope mine is a combination of both shaft and drift mining, with the mine opening being driven from the surface at an angle deep into the earth to the coal seam. In drift mining, coal seams outcrop and the mine is opened by driving into the coal seam. Coal is continuously mined or "won," following the seam as it dips or climbs or disappears. The method of extraction employed at Nuttallburg was drift mining, as were the majority of the mines in the New River Field. Deep, slope and drift mining all utilize the room (or bord) and pillar system of mineral extraction. In general, room and pillar mining removes large rooms of coal leaving individual pillars of coal to support the roof. This was the method of mining at Nuttallburg.

Mining operations at Nuttallburg were begun with parallel entries or galleries, driven 30 feet apart into the coal outcroppings along the bench level. One entry was for movement of men and coal, while the other served as an air course for ventilation. At intervals of 100 feet, breakthroughs were cut to allow for air circulation (See Fan House and Ventilation). Every third breakthrough was to have been cut on a diagonal to allow for the laying of track and the removal of the mined coal. This procedure, however, was not strictly adhered to at the Nuttallburg Mine. The previous breaks were walled-in to maintain and control proper ventilation within the mine. Ventilation was controlled by doors in the walls of the breaks, that were opened and closed to regulate air flow. At intervals of approximately 600 feet, side or butt entries were driven off at right angles and extended to the property lines of the mine. Once two parallel side entries were driven, rooms were assigned at approximately 30-foot intervals. Two miners were assigned to mine each room. The rooms were mined from both ends, meeting somewhere in the middle. The farthest rooms of the works were mined first, so that the pillars could be extracted and the roof permitted to settle. This was repeated, with rooms being mined and successively worked towards the main gallery.⁸⁰ The physical extraction of the coal from the rooms was accomplished using a system known as "pick mining."

Pick mining was the earliest system of mining employed at the Nuttallburg Mine. This system involved a series of tasks before

the coal could be extracted. The pick miner first undercut the face of the coal using a pick, creating a wedge-shaped cut. This task took from two and one-half to three hours to execute. Once this chore was accomplished, the miner used a breast auger (like a large carpenter's brace and bit) to bore three holes in the coal face. These holes had an upward slope or cant which was the mirror image, or opposite angle, of the undercutting. The placement of these holes was critical to how the coal was blown down. If these holes were not precisely located all of the coal would not be dislodged from the face; equally unsatisfactory was the potential for the coal to disintegrate and not fall in lumps. The determination of where these holes were drilled was based largely on the miner's experience. The greater the miner's experience, the greater the probability that the blasted coal would fall in lumps. Following the drilling of these holes, the holes were charged with black powder (later, safer powders known as "permissible" powders were developed and were much less volatile than black powder, and less likely to explode in the charging process) and the "miner's needle," an iron rod five to six feet long, was inserted into the charged hole. The powder was tamped down with "dummy," a layer of dirt or clay and the tamping rod or "miner's needle," was slowly withdrawn, leaving a hole for the insertion of the fuse, or "squib." The fuse, made of wax paper and black powder, was then lit and the coal blown down.

The next phase in the pick mining process was the firing of the charges. This usually occurred just before supper, with the miner retiring into a side entry to eat his dinner. The dinner break served another purpose: it allowed the galleries and rooms to clear of smoke. After the dinner break, the miner would return to his room and begin to shovel or hand load the "blown down" coal into waiting cars. The tonnage of coal that he and his helper shoveled into the coal cars determined the miner's daily wage. Essentially, the more coal shoveled, the more wages earned. When the miner had loaded all the coal and cleaned up his room, he was free to leave the mine. This was known as the "miner's freedom."⁸¹ However, miners were also responsible for other duties, including setting roof timbers, laying track, and cleaning coal of slate and other refuse. Often these were duties without pay and were considered as "dead time." These were the normal activities of a pick miner until the advent of mechanized coal mining in the late nineteenth and early twentieth centuries.

The development of electric and pneumatic mining machines is considered the birth of mechanized mining. These machines replaced the tedious task of hand undercutting the coal face, with machines that essentially replicated the process used by the miner to undercut the coal. These machines were first developed and tested during the 1870s and one of the earliest developed was the Jeffrey machine. Other manufacturers, such as Morgan-Gardner Electric Company, The Goodman Manufacturing Company and Sullivan Machinery Company also manufactured coal undercutting machinery. The Jeffrey

machine featured a cutting bar with an endless chain, much like the cutting bar of a modern chain saw, which moved parallel to the face and undercut the coal. The coal, however, still required blowing down and loading.⁸²

The first mining machines were introduced to the Nuttallburg Mine in late 1900 or early 1901, when two Jeffrey Shortwall Coal Cutters were brought on line in the mine.⁸³ This was the first attempt to mechanize the Nuttallburg Mine, however, not until the Ford era would the mine become more reliant on mechanized coal mining. It should be noted that the early mechanization of coal mining was resisted by many miners (not necessarily at Nuttallburg, or by every miner), who sometimes destroyed mining machinery, much like the Luddites of Great Britain who sabotaged labor saving devices. Many miners resisted the advent of mechanization, because these labor saving devices cost jobs and it undermined the traditional right of the miner's freedom. Despite this resistance to mechanization, the establishment and widespread use of mining machines was widely adopted by the coal mining industry.⁸⁴

The advent of mining machine technology at Nuttallburg was a watershed occurrence, marking the change from traditional pick mining to the new increased production methods of machine mining. (See Appendix VI for a comparison of pick and machine production) The use of this technology, however, was very slow to take hold at Nuttallburg, as indicated by production figures for the period of 1900 to 1910. Production from the mining machines was low, rarely exceeding 50 per cent of the total production in the period. For example, in 1901, 64,126 tons of coal were mined at Nuttallburg, with 57,784 tons pick mined and 6,341 tons machine mined. Similarly, in 1907, only 14,511 tons of the total tonnage of 41,894 tons was machine mined. After 1910, the majority of the coal won at Nuttallburg was machine mined. For example, in 1913, a peak year for machine mining prior to the Ford era, 46,828 tons of coal were mined, as compared to 13,589 tons using the traditional pick mining method. This increase in coal production was directly related to the fact, that over time, more mining machines were brought on line and by 1915, a total of six mining machines were in use at the mine. In 1920, the year Ford bought the mine, the total coal production of 26,833 tons and was entirely machine mined.⁸⁵ Production was down for 1920, but the Ford era was just beginning and new production records were forthcoming.

The Ford era ushered in a new program of modernization at the Nuttallburg Mine. One of the earliest and most fundamental changes to occur at the mine was the abolishment of pick mining. As stated above, the 1920 West Virginia Department of Mines report indicates Nuttallburg's production totaled 26,833 tons.⁸⁶ The coal production for 1921, doubled, yielding 50,932 tons, using four mining machines and no pick miners.⁸⁷ Interestingly, pick mining at Nuttallburg was resumed in 1925 and continued during the remaining period that the Fordson Coal Company operated the mine.

Presumably, Ford wanted to increase production by pulling pillars and used pick miners to this end. However, production using pick miners never competed with production using mechanized methods. For example, in 1926, a total of 175,443 tons were mined with 43,860 tons of the total pick mined, approximately 25 percent of the total production.

The Fordson Coal Company sold the Nuttallburg Mine leasehold in 1928 to the Maryland New River Coal Company. Maryland New River renamed the mine Dubree No. 4 in 1928. Coal was still mined using both machines and the traditional pick method, but pick production, like the Ford era, was very low as compared to mechanized coal production. For example, Dubree No. 4 production for 1930 totaled 163,284 tons, but only 1,821 tons were extracted with the pick method.⁸⁸ The amount of coal won at Dubree No. 4 using traditional methods continued to decline during the 1930s.

It was during the Maryland New River era that unionization came to the mine and to the New River Field. The unionization of the New River Field strongly influenced the mechanization of the Nuttallburg Mine.

The United Mine Workers of America (UMWA) organized the Nuttallburg Mine about 1917, but the local failed shortly thereafter.⁸⁹ Further union activities at Nuttallburg were shut-out as everywhere else in the state in the 1920s. This was the status quo until the spring of 1933, when Congress enacted the National Industrial Recovery Act (NIRA) and legitimized the UMWA right to organize the coal fields. Specifically, the NIRA's intention was

...the removal of obstruction to the full and free flow of interstate commerce, promotion of welfare through organization of industry under adequate government supervision, promotion of their fullest use of production capacity through increased buying power, reduction of unemployment, improvement of labor standards, and the conservation of natural resources.⁹⁰

The establishment of the NIRA spelled the end to a laissez-faire system of management, giving the federal government power to intervene in the affairs of the coal companies, and the rights of collective bargaining and organization were stipulated under section 7a. As a result of this new legislation, the UMWA was able to organize the coal fields of West Virginia, and thus the Nuttallburg Mine was organized in 1933.⁹¹

The use of pick mining at Nuttallburg ceased during the mid 1930s. The legitimization of unions under the National Industrial Recovery Act (and the later Wagner Act) and the subsequent widespread adoption of mechanization by the coal companies were final death knells for pick mining. There was a trade-off between the coal companies and the United Mine Workers of America in that

the union had the right to organize the coal fields, and the companies had the right to fully mechanize the mines. New technologies were then freely introduced to the coal fields, particularly relating to coal loading.⁹²

Maryland New River in the late 1930s adopted the use of conveyors to expedite loading.⁹³ Physical evidence at the mine site suggests that a Joy "15-CC" Portable Conveyor (also called a "pan" conveyor) was used in the mine. By adding or removing sections, the conveyor was capable of being lengthened or shortened to meet the needs of a particular room.⁹⁴ Coal shoveled into the conveyor trough at the face, was conveyed or dragged by an endless chain fitted with flights and discharged at the head end into waiting cars.⁹⁵ Even though coal loading became mechanized at Nuttallburg, the majority the coal mined, was still loaded using hand methods.

In 1936, the first year the West Virginia mine report notes the use of conveyors, only 11,233 tons of the total production of 128,954 tons mined were hand loaded onto the conveyor at Dubree No. 4. The number of tons loaded onto the conveyors and the number of conveyors fluctuated over the next 15 years but gradually increased until 1952, when 44,729 tons of the 75,631 tons produced were conveyor loaded. In 1950, the state mine report indicates the use of eight conveyors underground at Dubree No. 4. Production increased in 1952 as compared to the previous years, and this reflects the increased use of mechanization at the mine. Maryland New River ceased operations in 1953.

In 1954, the mine was first leased to the Margie Coal Company and later that year to the Garnet Coal Company, but apparently neither did anything to improve or modernize the mine (and coal mined was probably in the form of pillar robbing). The Nuttallburg Mine was in its august years, and the increased use of technology reflects the attempt to keep the mine competitive with other mines in the New River Field and the state on a whole. However it was a case of too little, too late, because the mine went out of production in 1958.

Headhouses, and Monitor and Conveyor Systems

Mining in the New River Gorge presented special problems in designing and engineering mine structures because of the distance of the mine from the railroad. Generally mines in the gorge employed two principal mine structures when processing coal: headhouses and tipples. The headhouse's main function was to weigh and store coal prior to being delivered to the tipple. The tipple's principal function was to process or sort coal into the various marketable sizes and grades, and load it into railroad hopper cars. An additional function of the tipple was coal storage. The difference in elevation of these two structures with

the headhouse located near the mines on the bench level and the tipple at track level, required some type of conveyance system to bring the coal down from the headhouse to the tipple. In general, mines in the New River Gorge used the monitor car system to connect the headhouse to the tipple. Monitor systems used twin monitor cars which worked in tandem to deliver coal to the tipple. The monitor cars held a discrete amount of coal, and were shaped somewhat like a very large barrel on wheels with a trapdoor on the bottom for dumping the coal. In the later years conveyor systems superseded the use of monitors in the gorge. There were many types of conveyors used the West Virginia fields. One of the more popular conveyors used was the retarding or "button and rope" conveyor. This conveyor employed an endless steel rope with buttons or disks which ran in a trough, and impeded the coal's tendency to slide down the trough, thereby conveying the coal to the tipple with minimal breakage.

John Nuttall II, in his history of Nuttallburg, Trees Above, with Coal Below, relates the original Nuttallburg Headhouse was constructed at the time the mine opened. A historic photograph of this structure reveals much about its construction and operation. Constructed circa 1873 or 1874, the Headhouse was built using heavy timbers, which was typical of New River Gorge construction of the time.⁹⁶ This structure was perched on the edge of the bench level, in line with the main mine entry. The Headhouse was a one-story building, with a gable roof and clad with vertical wood siding. The north gable end roof was extended out over the bench level (probably to allow mine cars to pass around the curve). The Headhouse interior was lit by a series of windows on the east and west elevations and perhaps by electric lights in the later years of operation.

The interior layout of the Nuttallburg Headhouse was probably similar to the one at the Kaymoor Mine with scales, dump and mine car kickback. Photographic evidence suggests the movement of coal in the Headhouse. It appears that the loaded mine cars entered the Headhouse from the west side, where the car was probably first weighed (most likely in the overhang area) and then drifted forward to a crossover dump. At the crossover dump the mine car was emptied. The empty mine car was then drifted forward to the kickback (visible in the photograph), switched onto the east side tracks and back out of the Headhouse for return to the mine or elsewhere for repairs. Beneath the crossover dump was located a 50-ton bin from which the Monitor Cars were loaded. Each Monitor Car (a steel tube with a hinged door on wheels) had a 7-ton capacity and worked in tandem, with the descending loaded car pulling the empty car up the monitor track. They traveled down the side of the gorge on an inclined plane with parallel tracks. The monitor car would automatically dump its contents at the tipple when a lever was tripped. The tracks passed over the Keeney's Creek Branch of the C&O Railroad on a timber trestle and reached the Tipple (see Tipple section) on a very high and long timber

trestle.

The drumrunner, a worker who controlled the Monitor Car's travel, operated a twelve foot diameter wooden drum with 1-1/4 inch steel ropes to lower and raise the monitor cars. The drum was mounted on concrete piers with heavy springs clamped to the axle to act as a braking mechanism, and was apparently located beneath the 50-ton storage bin. The Drumhouse was evidently located adjacent to the storage bin. This was a pulpit where the drumrunner stood to operate the Monitor. The Drumhouse was an open to the weather having only a roof. The drumrunner needed great skill when operating the drum, manipulating the six-foot long control lever to gently lower the loaded Monitor Car to the tippie level in all kinds of weather.

The original Nuttallburg Headhouse and Monitor System was replaced by a modern steel Headhouse and Conveyor in 1925-26. This work was part of the final phase of modernization at Nuttallburg initiated by the Fordson Coal Company. As noted, these structures were erected by the Fairmont Mining Machinery Company of Fairmont, West Virginia.

The Headhouse is of steel construction with three levels. On the first level are located the scales, check weighman's room, car stop and crossover dump; the second level houses the reciprocating feeder; the third level the conveyor head sprocket and motor room, and is where the Conveyor joins the Headhouse. The Headhouse is clad with corrugated steel with the roof supported by King Post trusses, and the structural members used in the headhouse's construction are rolled steel sections, with the columns supported by concrete piers. The flooring was wood. One of the most interesting features of the Headhouse is the northeast corner of the structure. The corner was not supported with a corner column, but rather had an offset column working with a horizontal beam to carry the load from the corner. However, this beam has since been removed and the corner has collapsed. The Headhouse was constructed in this way to allow the surface haulage to turn the corner on the narrow bench.

The coal movement in the new Headhouse was essentially unchanged from the original Nuttall Headhouse, with coal being weighed and dumped. The principal difference was the empty mine cars were sent out along the bench rather than being returned by the kickback arrangement used in the former Headhouse.

Specifically, the movement in the Headhouse was as follows. The loaded cars or "trip" were collected in the mine using gathering locomotives and were brought to the surface using a haulage locomotive, emerging from the main mine entry just north of the Headhouse. The first car of the trip was drifted into the Headhouse and stopped using the front horns of the Nolan Automatic Scale and Dump Feeder (The Mining Safety Devices Co., Bowerston,

Ohio)⁹⁷. This device featured both front and rear horns that were used to stop or "scotch" the loaded cars. These horns worked in pairs with one pair always closed, or engaged, and the other always open, or disengaged. This mechanism worked in tandem with the Phillips Automatic Crossover Dump (Phillips Mine and Mill Supply Co., Pittsburgh, Pennsylvania),⁹⁸ with the dump activating the automatic feeder. The front horns were manually opened by activating the crossover dump and the first car was drifted forward onto the scales (probably manufactured by the Fairbanks, Morse and Company of Chicago, Illinois) for weighing; while at the same time engaging the rear horns and stopping the third car. The first car's weight was recorded using a Streeter-Amet Weight Recording Attachment (Streeter-Amet Weighing and Recording Company, Chicago, Illinois), which recorded the actual car weight on a paper tape as well as visually indicating the weight on a dial scale.⁹⁹ Following weighing, the rear horns were manually opened, again by activating the crossover dump and the second car fed onto the scales, with the third car being stopped by the closed front horns. Following the weighing of the second car, the front horns were disengaged and the third car was fed onto the scales. As the third car was on the scale, the first car was then on the crossover dump.

At the crossover dump, the first car was scotched. As it entered the crossover dump, a headhouse laborer would attach a hook suspended from the above truss to the front end of the mine car. Then the crossover dump would be activated, dropping the bottom of the first car and depositing the coal into the hopper beneath the car. (There was an additional hopper, adjacent to the main hopper, which was probably used for loose coal.) Once the contents of the car were dumped, the crossover dump car stop was released by the weight of the second car, which depressed a rail treadle as it was fed onto the crossover dump. The empty first car then drifted down an incline to the southern end of the Headhouse. Because of the tandem action of the automatic feeder and the crossover dump, only one operator was required to activate the dump, which in turn fed cars to the scales and the dump. The empty cars were drifted on a run-out track positioned along the edge of the bench. After all the cars had been weighed and dumped, the system was overridden (which allowed the horns to be in an open position) and the cars were hauled back out of the Headhouse to a secondary mine opening for redistribution in the mine.¹⁰⁰ Reportedly, these trips were often 50 to 60 cars in length.¹⁰¹ However, the number of cars in a trip would vary with daily production.

After being dumped into the crossover dump hopper, coal was fed onto the Retarding Conveyor by a reciprocating feeder. The reciprocating feeder motion distributed the coal evenly upon an apron, (a flat steel plate), leading to the Conveyor trough, with the reciprocating action derived from an eccentric cam operated by the Conveyor drive. The weight of the coal alone was sufficient to propel it down the Conveyor trough, however, the button and rope system was designed to retard the coal from sliding down the

trough. Since coal mined from the Sewell seam is very "friable" or breakable, the retarding conveyor's purpose was to convey coal to the bottom of the New River Gorge with a minimum of breakage. Minimizing coal breakage, translated into increased production of sizes to be screened, lowered operational costs, and uniformly delivered coal to the tippie. Equally important was the Conveyor's ease of operation. The Conveyor operator did not need any particular skills since the Conveyor was basically self-operating, that is, it was either on or off. On the other hand, a great deal of skill and dexterity was required in operating the previous Monitor System to ensure a gentle delivery of the coal. This ease of operation reflected the Ford philosophy of streamlining production at the Nuttallburg Mine.

The Retarding Conveyor had a rope speed of 80 feet per minute and was capable of delivering 125 tons of coal per hour. A 1-1/8 inch wire rope of an alternate and Lang lay type,¹⁰² with cast iron buttons spaced at approximately four foot intervals, traveled down the Conveyor on the lower trough and returned on the upper trough. Both troughs were of wood construction, with steel plates lining the surfaces in contact with coal and the buttons. The Conveyor was powered by a 440 volt induction motor, rated at 75 hp. However, this electric motor was used only to start the Conveyor, for once in operation the weight of the coal powered the Conveyor. There was no mechanical break to slow down or stop the Conveyor, due to the inherent friction of the system.¹⁰³ The flywheel was powered by a belt from the electric motor, which in turn transmitted power to the intermediate gear and powered the Conveyor drive sprocket and the buttons and rope. The Conveyor tail sprocket was supported with heavy steel I-beams, set at an angle, which transmitted the torque and load into concrete footers.

The Button and Rope Conveyor was erected in 1925-26 by the Fairmont Mining Machinery Company of Fairmont, West Virginia. It was completely constructed of steel (except the troughs), in an era when most similar conveyors used timber construction. The Conveyor gallery was constructed using steel channels for the bottom chords and steel angle irons for the top chords and other members, including diagonal bracing and the trough supports. On the east side of it was a catwalk with wood flooring. The Conveyor gallery is sheathed and roofed with corrugated steel (now in a state of disrepair, with entire sections gone), and supported by towers that are spaced at either 15- or 45-foot intervals. The Conveyor trough has two graceful vertical curves, with the top curve having a radius of 3,000 feet and the bottom curve with a radius of 1,350.

As advertised in the 1928 Keystone Mining Catalog, the Fairmont Mining Machinery Company designed and constructed button and rope conveyors, and the Nuttallburg Conveyor is shown as representative of Fairmont's engineering prowess.¹⁰⁴ Further, the Coal Age article on improvements at Nuttallburg states that Fairmont designed, fabricated and erected the Conveyor. While this

evidence suggests that Fairmont erected the Conveyor, it is not clear that they actually manufactured the components used in the fabrication of the Conveyor. On-site inspection of the extant structure and components reveal the equipment to have been manufactured by the Jeffrey Manufacturing Company (Columbus, Ohio), as the head sprocket matches the ones used to illustrate contemporary Jeffrey advertisements. Thus, it seems that Fairmont Mining Machinery Company purchased Jeffrey drives and other components and designed and erected these components as their own conveyors to suit their clients needs. However, this is not conclusive, since the Conveyor could have been retrofitted by the Jeffrey Manufacturing Company at some time during its years of operation.

Tipples

A tipple is a facility for processing, storing and loading of coal. Generally, coal is processed or sorted into various marketable sizes with the use of screens. Essentially, these screens are very much like the wire mesh used to enclose porches. The major difference is the size of the screen's mesh. Mosquito screens have a very fine mesh, while the screens used in the processing coal have holes from 6" in diameter down to 3/4" and smaller. Furthermore, some screens used square or rectangular holes, rather than round ones.

The sorting of coal was accomplished by passing the coal over multiple screens, beginning with ones having the largest holes first, then progressing down to the ones with the smallest holes. Thus, any coal smaller than the holes in the screen passed through and the larger pieces, called lump would collect. The remaining coal was screened again and the egg-sized coal would be collected. This process was repeated until all sizes were sorted. In general, this process was facilitated by having three levels of screens positioned such that the smaller coal dropped to a screen with smaller holes beneath it and so forth.

The earliest tipples of the eighteenth century employed gravity screens. Coal was dumped at the top of the inclined screening deck, and the weight of the coal propelled it down and over the screen, separating the coal. Again, multiple deck levels were often utilized. By the late eighteenth century, tipples featured shaker and vibrating screens which, induced coal movement through oscillation and vibration. In the case of shaker screens, an inclined deck was used; however, most vibrating screens were horizontal or slightly inclined. Gravity and shaker screens required higher tipple height because of these inclined screens. The horizontal screen arrangement, because it was horizontal, allowed for a lower tipple height. The horizontal screens also allowed for the coal to be picked or cleaned of any refuse that may not have been removed when the coal car was loaded in the mine.

Lastly, as the markets for coal changed, so did processing. Coal continued to be screened, but it was also cleaned, or washed, of dirt and other small particulate matter through the use of mechanical, pneumatic, and chemical washers. An entire range of these coal washers were available to mine owners and operators.

There were several sizes of coal screened in the bituminous fields. These sizes ranged from lump, (the largest marketable size), to egg, stove, nut, pea (or stoker), and slack (the finings). Additionally, run-of-mine coal was also available, which was all sizes but with the waste and slack removed. The actual sizes of the various grades of coal depended on which bituminous field produced it. For example, in the New River Field lump was coal 6" and over, egg 6" to 2-1/2", stove 2-1/2" to 1-1/4", nut 2" to 1", stoker 1-1/4" to 5/8", and slack 1/4" to 0.¹⁰⁵

The coal, once sized, was most often loaded directly from the screens via chutes into railroad hopper cars under the tippie. Sometimes graded coal was stored in bins beneath the screens and loaded at some later time. This was particularly true in the anthracite fields of Pennsylvania. Often raw, ungraded coal was stored at the tippie in huge bins to be screened later, because of rail car unavailability. The storage facility enabled the mine to continue operating without having rolling stock to fill as the coal was being screened.

Historically, there have been at least three tipples at the Nuttallburg Mine. The first two were constructed by John Nuttall during the Nuttall era and the third was constructed by the Fordson Coal Company, with improvements by the Maryland New River Coal Company.

The earliest Tipple at the site was probably erected in 1873-74, when Nuttall first established the mine. Only photographic evidence and a brief description in Trees Above, With Coal Below are available to describe this first Tipple's appearance and operation. It was located at the north end of the flat plain that comprises the tippie level and was built up against the hillside. It was constructed of wood and had two levels. The uppermost level was a silo at the north end, where the monitor track entered the Tipple and the lower level, with an attached shed on the south end, where the coal was loaded out. The configuration of this building indicates the use of a gravity screening system. In fact, John Nuttall II recalls that "as each monitor dumped its load into the top of the tippie, all of the fine stuff called 'slack' fell through the holes into a large bin..."¹⁰⁶ Specifically, the technology of the period used an inclined stationary bar screen or "grizzly." This system featured parallel longitudinal bars (instead of holes), spaced approximately 5" apart, over which the run of mine coal passed, depositing the slack in a bin below, and collecting the lump at the foot of the screen in another bin or loaded directly into cars. It was common practice during the 1870s

to sell the lump coal only and discard the slack, although Nuttall used the slack for coking.¹⁰⁷ Obviously, this was a very crude screening system.

Photographic evidence indicates the lump coal was loaded directly into tandem hopper cars, which were then drifted down parallel inclined planes to a trestle spanning the railroad siding, where they dumped into waiting hopper cars. Following dumping, the empty cars were hauled back to the Tipple using some type of haulage system, perhaps with a drum arrangement of the type used for the monitor system. The slack was stored in a bin and was loaded into lorry (pronounced "larry") cars in the central section of the Tipple. These cars were then conveyed to the coke ovens.

Nuttall was not satisfied with this particular Tipple arrangement and soon after it was built (perhaps the late 1870s) he replaced it. The new Tipple was constructed adjacent to the Nuttallburg railroad siding, above the C&O mainline. Again, only photographic evidence is available to describe both the Tipple's appearance and operation. Constructed of wood, this structure was wedge-shaped with a high, steeply pitched roof, with the monitor track and trestle entering the structure from the north. Again, the Tipple's configuration, with its high sloping roof, implies the use of gravity bar screens, with the run-of-mine coal screened and the slack stored in bins. Lump coal was loaded out on two tracks, with a third track loading slack into lorry cars. The slack track traversed the top of the coke ovens to facilitate charging the ovens.

The second Tipple was enlarged, expanding its scope of operations, sometime in the early twentieth century, and occurring no later than 1919. These improvements were probably performed by the Nuttallburg Smokeless Fuel Company. The 1922 Keystone Coal Field Directory indicates the company was using shaker screens in their coal preparation at this time. Photographic evidence supports this, showing the expanded Tipple with what appears to be new storage and additional screening facilities. Perhaps coal refuse picking tables were also installed since they were the prevailing technology of the era, but this is uncertain. The Nuttallburg Smokeless Fuel Company shipped run of the mine, slack, nut, egg, and lump.¹⁰⁸ This Tipple was operating when the Ford coal interests purchased the mine.

The third, and only extant Tipple was constructed in 1923-24 by the Roberts and Schaefer Company of Chicago, Illinois for the Fordson Coal Company. This tipple is of all steel construction and has four main parts: the Conveyor House, the Screening Room, the Coal Storage Silo, and the Loading Room. The Conveyor House is where the Retarding Conveyor enters the Tipple and originally was the machinery support structure for the Marcus screen drives. This original rectangular structure was constructed of poured reinforced concrete with the lower level (basement) open on four sides, and

the screen drives on the upper level (the upper level was probably enclosed, but its configuration is unknown). Additionally, this structure was the delivery point for the Conveyor and the Monitor System (although, apparently the monitor dumped onto a conveyor situated perpendicular to the screens and the coal was conveyed to the screening table). Apparently, the Tipple was designed in anticipation of the Conveyor's construction. When the Conveyor was constructed, the Conveyor House was modified with the addition of two more levels. The second and third levels added are of steel construction with wood floors. These new levels housed the conveyor tail sprocket and conveyor return trough respectively, while the first level was the delivery point of the Conveyor. Apparently the basement part of the structure was walled-in with brick at the time of the Conveyor's construction and evidently served as the Tipple Boss's office. The first level measures approximately 14'-4" by 19'-8". The Screening Room housed the Marcus screening equipment, which extended into the Conveyor House to the Conveyor delivery point. The Screening Room apparently dates to the Tipple's construction and features skylights for illuminating the picking table. The Screening Room was extended into the Conveyor House with steel beams and wood flooring. This room measures approximately 16'-11" by 52'-2". The Silo was used for run-of-mine coal storage, and was processed as needed. This structure measures approximately 15'-4" by 15'-9" by 49'-5" tall. The Loading Room housed both the loading booms used for loading coal into railroad cars, and the house coal loading facility. This room measures approximately 30'-6" by 36'-11". It should be noted that the delivery point for the Conveyor, Screening, and Loading rooms are on the same level and are approximately 14'-0" above the track level.

In general, rolled structural steel sections with riveted joints are used throughout the Tipple and is clad with corrugated steel. The roof of the Loading Room is supported by Warren trusses, and the roof of the Screening Room/Conveyor House is supported by King Post trusses. Three railroad tracks are located beneath the Tipple to facilitate the loading of coal.

The Roberts and Schaefer Company manufactured two types of horizontal screens: bi-level and tri-level screening systems. Both featured a combined picking and screening table. The tri-level screening system seems to be an improved design of the bi-level arrangement. It gained popularity in the 1920s, while the bi-level screens were popular in the early part of the century. Consequently, the Marcus horizontal screen and picking table system installed at Nuttallburg most likely featured a tri-level deck arrangement.

In general, these tri-level deck screening tables featured a refuse trough above the table, used for waste in the picking process. The waste was vibrated down the trough collecting in a bin. It is unlikely the Nuttallburg Tipple equipment had this

feature. The Marcus screens generally screened four sizes of coal, using screens with 1-1/8", 2", 3", and 5" diameter perforations. Additionally, these screens could be interchanged with screens having other size perforations, so that any mixture of sizes was possible.¹⁰⁹

The Marcus screen drives used differential motion: a slow forward stroke combined with a rapid return stroke. This differential motion induced a forward wave or motion in the screening table, and the coal was vibrated down the screening table, passing over the screens.¹¹⁰ At Nuttallburg, the flywheel and drive for the Marcus horizontal screen was located below and behind the conveyor tail sprocket, at approximately a 45-degree angle. Apparently, the drive was powered by an electric motor and was belted to the flywheel. Both the slow and rapid strokes were obtained by the use of an eccentric crankshaft and rod arrangement. Parts of this eccentric system are still visible beneath the flooring of the Tipple at the south end of the screening room, just adjacent to the outside loading boom.

The Marcus screening and picking table installed at the time of the Tipple's construction is no longer extant. The following discussion of its operation is based on a lecture given by Warren Roberts, of the Roberts and Schaefer Company in 1916, to the West Virginia Coal Mining Institute. Coal from the Retarding Conveyor was deposited directly onto the northern end of the table. As the coal vibrated down the northern end of the table at approximately 45 to 50 feet per second, any slate or refuse not cleaned in the mine was picked from the coal (coal could be picked at any part of the table). The coal then flowed down the table over the first set of perforations, and the nut and slack passed through the screen to the middle deck onto a second screen. The slack was removed from the nut and passed to the lower deck, and was then transmitted on a dead plate (a plate without any holes or screens) to the slack chute. The nut was carried forward on the middle deck, and vibrated down to the lower deck. As the nut passed through a closable gate or valve, it was deposited on the middle loading boom. The balance of the egg and lump coal was carried to the south end of the upper deck and deposited directly upon the outside loading boom.¹¹¹

A mix of grades was possible both by interchanging screens and the opening and closing of the gates. The gates or valves controlled the flow of coal. Closing all the gates permitted the run-of-mine to be conveyed to the end of the table and loaded out on the outside loading boom; or it could be directed into the Silo coal elevator adjacent to the Screen Room. Precisely how coal was directed to the elevator is unclear.

The bucket-type elevator (now collapsed) rose up the side of the Silo, or storage bin, and allowed for coal to be stored for future use. The stored coal had a separate screening system.

Gravity deposited the coal onto a Roberts and Schaefer shaker screen, an oscillating screen which allowed the nut and slack to pass through onto a second screen. The slack passed through this screen and was conveyed by a archimedean screw (chain driven from the shaker drive) back to the slack track. The remaining coal was deposited directly into a chute beneath the shaker screen and conveyed down to the outside track by gravity. The remaining coal passed under the Marcus screening table and was dumped directly onto the inside loading boom for loading out.

Loading booms installed at the Tipple were of a Marcus design, featuring a motor driven metal conveyor belt. The upper end pivoted, permitting the lower end of the boom to be raised or lowered as required when filling a coal car. Loading booms were used at tipples because they helped minimize the breakage of coal by gently conveying it into the waiting coal car. The coal car was loaded by lowering the boom into the car and conveying coal into it. As the car filled, the boom was raised and the coal car moved forward, then the boom was lowered again and the filling continued until the car was filled to capacity. This process was repeated until all waiting coal cars had been loaded. Each loading boom was raised and lowered with an electric hoist suspended below the roof truss, and a process aided by a pair of counterweights, located in pockets formed by the Tipple's support columns that flank the booms.

Artifactual evidence suggests that the coal cars were moved at track level with a winding engine. The empty cars were pulled up the slight incline of the Nuttallburg siding with the winding engine, and the full cars drifted by gravity back down to the C&O mainline. The winding engine eliminated the need for a yard engine to move coal cars. The winding engine was located downstream of the Tipple between the outside railroad track and the embankment above the C&O mainline.

This haulage system may have also been used for "layer loading," a technique of loading hopper cars in layers in an attempt to produce a more uniform product, the same size and quality coal in a given railroad car. Additionally, this technique was used to produce mixtures of coal such as a premium grade mixed with a lesser grade, or any combination of sizes and grades desired by a customer. Basically the process was very simple with two to six connected hopper cars and that passed under the loading boom two or more times, with each pass partially filling the car until the car was full.¹²

The inside loading boom was used not only to load coal cars, but also to convey house coal across the loading room to another conveyor, which then transported it to a hopper at the northeast corner of the Tipple. This coal was sold to the residents of Nuttallburg to be used for heating and cooking.

The processing and loading of coal remained essentially unchanged during the early years that Maryland New River operated the mine. However, in 1952 Maryland New River modified the tipple with new processing equipment installed at the downstream end of the structure. In particular, they installed a Belknap Chloride Washer for processing coal.¹¹³ This equipment was probably installed as a move to modernize the facility in an attempt to tap the growing market for clean, sized coal for use at coal-fired power plants. In 1952, Maryland New River began offering a "special stoker" coal sized from 1-1/4" to 5/8", which implies their intended market was utility and industrial power plants.¹¹⁴ It is unclear who installed this equipment, however, the Kanawha Manufacturing Company of Charleston, West Virginia (a tipple and preparation plant engineering and erection concern), held a franchise for manufacturing the Belknap Chloride Washer and may have been responsible for its erection at the Nuttallburg Tipple.¹¹⁵

The Belknap process was a "dense-media" process that used a low density calcium chloride solution coupled with a mechanical impeller or agitator which caused an upward movement within the solution, thereby separating the coal from the denser refuse. The Belknap Chloride Washer was shaped much like a soup ladle, with the calcium chloride reservoir analogous to the ladle bowl and the conveyor the handle. Typically, the raw coal was dumped into the solution and floated, while the refuse sunk to the bottom of the washer. The clean coal was conveyed up the drag conveyor, through a dewatering trough, where it was sprayed with water and then discharged at the top of the washer, to be either loaded out or stored. The refuse on the bottom was conveyed to one side of the machine and conveyed to the top, where it was discharged into a refuse bin. In general this process was used to clean coal sized from 6" egg to 3/8" pea, but was usually set up to clean only one size of coal. The calcium chloride solution used in the Belknap process not only cleaned the coal, but also made it dustless and nonfreezing.¹¹⁶

The Belknap Chloride Washer was installed at the Nuttallburg Tipple in 1952. This installation apparently required the removal of the original Marcus picking table screen to allow for the installation of other new equipment. The original coal delivery point was extended so that the coal would dump onto a new drag conveyor located parallel to the inside loading boom. Physical evidence suggests this was accomplished by shortening the original delivery chute and welding a section of a pan conveyor to this chute. It was then extended, with additional pan conveyor sections, approximately 35' to the drag conveyor bin. The drag conveyor was installed perpendicular to the original screening arrangement and passed upward through the silo into the downstream addition at approximately a 30 degree angle. Coal traveled up this conveyor, passing over the slack screen midway up the conveyor. The slack passed through this screen into a storage bin for later

loading and the balance of coal continued up the conveyor. At the top of the conveyor, the coal passed over the stoker coal screen and was then gravity fed into the Belknap Chloride Washer. Here as described before the coal was cleaned and the coal conveyed back into the Tipple where it was loaded out on the center track. Artifactual evidence suggests that the disposal of refuse varied slightly at the Nuttallburg Tipple. Instead of being conveyed up the washer, it was apparently conveyed up a separate drag conveyor located parallel to the washer and transferred to a large timber bin located northwest of the Tipple. The remaining lump coal would either be directed into a chute and loaded out or stockpiled and cleaned later.

Refuse

Refuse is a waste byproduct of coal mining. When coal was blown down, part of the mine roof was also blown down. Generally the roof was composed of shale (generically called "slate"), or a combination of shale and coal called "bone coal." The refuse was cleaned from the coal while the coal was loaded into mine cars. A miner was paid for the clean coal he mined, not for refuse, and he was responsible keeping slate and refuse out of the loaded mine car. This refuse was generally left inside the mine; however, the Nuttallburg site is littered with slate and bone coal, which implies that it was brought outside the mine and dumped.

Historically, slate and other refuse at Nuttallburg may have been conveyed out around the east side of the bench level and dumped, because there are large piles of slate and bone coal in this area and this area was mined first. Photographic evidence from the Ford era depicts a huge scar which indicates that refuse was dumped in the area west of the conveyor. In fact, this photograph shows a timber platform constructed on the edge of the bench apparently built to facilitate refuse disposal.¹¹⁷ The refuse was probably conveyed to the dump sites in mine cars, but it is unclear what type of dumping mechanism, if any was employed. It is possible that the refuse was shoveled by hand or some type of rotary dump was employed. Additionally, refuse was picked at the Tipple.

Coke and Coking

Coal that is burned in a limited atmosphere produces coke. In the coking process, impurities, such as sulfur, are driven off and the resultant coke is virtually pure carbon.

The manufacture of coke was a very important sibling industry to coal mining at Nuttallburg and many other mine sites in the New River Gorge. Coke was used in the manufacture of pig iron and had many other uses including blacksmithing.

One of John Nuttall's earliest improvements at Nuttallburg, were the construction of coke oven batteries. He built 80 beehive coke ovens, each having a five-ton capacity. These ovens were constructed in double batteries radiating out from the tipple. Photographic evidence indicates that the coke ovens were located on both sides of the trestle leading to the tipple, and another bank was constructed on the downstream side of the tipple (these are still extant). The ovens were charged using lorry cars, from tracks that traversed the tops of the coke ovens. These tracks were interconnected and passed under the tipple, where the lorry cars were loaded.

Each oven was charged with five tons of slack (used because it fused better than other grades of coal), ignited and allowed to burn with a controlled draft for approximately 24 to 48 hours. After burning, the coke was drawn from the ovens by the coke drawers, extinguished or "quenched" with water, loaded into railroad cars for shipment to western and eastern markets. Probably the greatest consumer of Nuttallburg coke, was the steel industry, whose mills used it in the production of pig iron, the first step in the steelmaking process.

The earliest West Virginia mine records (1883) indicate that 17,248 tons of coke were produced by the Nuttallburg coke ovens and shipped on the C&O Railway. Coke production at Nuttallburg fluctuated over the next 40 years; some years as many as 20,608 tons of coke was manufactured, and other years there was no coke production. This was due to changes in market demand for coke. When market demand was high, the ovens were in blast, and when it was low the ovens went out of blast. The Ford era spelled the end of coking at Nuttallburg as the mine's entire coal output was shipped to Ford's River Rouge Plant in Michigan. Coke for Ford's River Rouge Plant was produced on-site, effectively ending coking at Nuttallburg.

Another factor causing the cessation of coke manufacture at Nuttallburg was the advent of the Koppers (and others) byproduct coke oven. The Koppers method captured the gases released in the coking process and these gases were converted into coal byproducts such as naphthalene and other chemicals. Clearly, it was more profitable to capture the gases released in the coking process and manufacture additional products than to use the beehive oven to merely produce coke.

All available evidence indicates that the Maryland New River Coal Company never coked coal at Nuttallburg, and consequently the ovens have been idle since 1919 or 1920. Today, 46 beehive coke ovens sit idle at the Nuttallburg Mine site, although many more may be hidden under the tons of mine refuse and kudzu that cover the Tipple level site.

Section 2.3 Ancillary Mine Structures

Fan House and Ventilation

Ventilation is an important aspect of coal mining regardless of how the seam is mined albeit deep, slope, or drift mining. Ventilation is required to clear the mine of dangerous gases that are released by mining operations. These gases were collectively known as "damp" (from the German word for vapor or fog, dampf). For instance, "fire damp" (methane gas from decaying vegetable matter and roof supporting timbers) can cause mine explosions, or "black damp" (carbon dioxide) can cause death from asphyxiation.¹¹⁸ Ventilation was equally important was for clearing black powder smoke and, later, coal dust from the mine workings. High concentrations of coal dust combined with methane gas could cause devastating mine explosions; such as the Monongah Mine explosion at Monongah, West Virginia in 1907.

Early New River drift mines like the Nuttallburg Mine were ventilated using the traditional chimney or furnace system. This was a variation on the Welsh deep mine method of digging a shaft parallel to the main shaft and building a fire at its base. The updraft caused by the heat rising up the shaft drew air through the mine workings, thereby ventilating them. Similarly, the drift mine ventilation method used a brick or stone chimney and firebox, constructed at the mouth of an entry air course (parallel to the main entry). The air flow could be regulated with the use of trapdoors, which could be opened or closed, as required to regulate the airflow through the various mine sections.¹¹⁹ The furnace was the predominant form of mine ventilation prior to the advent and widespread adoption of ventilating fans.

Around 1900, the first mine ventilating fan was installed in the Nuttallburg works. The 1901 state mine report notes this fan was an 18-foot force fan (blowing air into the mine), and provided adequate ventilation.¹²⁰ Later state mine reports indicate the use of a 16-foot steam driven fan (by Crawford and McCrimmon Company, Brazil, Indiana) which could be operated in either a blowing or exhausting mode.¹²¹ In about 1914, a five-foot booster fan was installed at the mine, acting in tandem with the larger fan to ventilate the mine. The 1914 mine report states that this system worked with limited success.¹²²

After 1914, the West Virginia Department of Mines reports no longer furnished information about mine ventilation, so consequently there is no state documentation of the later ventilation methods at Nuttallburg during the Ford or Maryland New River eras.

Fortunately in 1927, Coal Age featured an article on Ford's renovations of the ventilating system, which was installed at the time the new Headhouse and Conveyor were constructed. The steel

Fan House measured approximately 6' by 12' and featured a steel exhaust hood (probably by The Jeffrey Manufacturing Company, Columbus, Ohio). It was constructed roughly 350 feet above the mine's workings on the canyon's plateau and about 9000 feet from the main mine portal. (Nothing was reported about constructing a ventilating shaft, so the old Nuttallburg Colliery Company slope mine shaft located near Edmund was probably used, but this is only speculative.) A 3' by 5' multi-blade fan which was chained driven by a 75 hp 3-phase 2,300 volt variable speed electric motor with an automatic starting motor (no equipment manufacturers were reported) was used for ventilating the workings. The variable speed motor allowed changing the exhaust fan's output, as required due to fluctuations in the natural airflow which were caused by changes in the ambient outside temperature. During the summer, the airflow within the mine was greater and consequently less mechanical ventilation was required, which translated into a slower motor speed. Conversely, in the winter when the airflow was the least, more mechanical ventilation was required and therefore a greater motor speed. In addition, the fan could be started, stopped, or its speed changed from underground in the mine. The remote fan speed control eliminated the need for a Fan House operator to monitor the fan speed, and only required an once a month inspection.¹²³

During the Maryland New River era a new Fan House was constructed. The Fan House, still extant¹²⁴, was built at some time in the late 1940s or early 1950s. It is constructed of concrete block with a concrete slab roof, and features a steel exhaust hood on the east elevation. The L-shaped structure measures approximately 23' (south elevation) by 26' (west elevation) by 16' (east elevation), with a return of approximately 16' (north elevation) by 13' (east elevation). The south wall had steel blast doors leading to the mine opening, with a separate door entering the motor room. The interior of the Fan House is divided into three parts: the passageway to the mine, with an interior door; the blower room, perpendicular to the passage; and the motor room. Most of the equipment in the fan house is still in-situ, although the motor has been stripped of its windings.

The equipment used in the Fan House included: General Electric Company (Schenectady, New York), Three-Phase Induction Motor, Model No. 17889; Type FTR-532 8 30 900; and a Jeffrey Manufacturing Company (Columbus, Ohio), Centrifugal Fan, Size 4'x 2', Serial No. 760. The electric motor was belted to a flywheel in the motor room and power was transmitted to the fan through a pedestal mounted driveshaft. The fan drew air through the mine and exhausted it through the exhaust hood on the east side of the Fan House. The patent date for the blower motor is 1924, which implies that this equipment was previously installed at another location, however probably not at the above described Fan House.

The Maryland New River Coal Company initiated rock dusting,

the process of spraying or "dusting" the mine with limestone dust, in about 1952.¹²⁵ The dry limestone dust was sprayed on the working face, mined coal, in old workings, on the roof, and anywhere coal dust was likely to accumulate. This process was used to keep the coal dust down, therefore making it less likely to mix with methane gas and lead to mine explosions.

Powerhouse and Substation

Coal mine sites needed steam and electric power to operate ventilating fans, locomotives, and other mine equipment. Steam engines were the prime movers during the mid-to late-nineteenth century and were often used pump water from the mine workings and later to power ventilating fans. By late in the century, they were used to power dynamos for the generation of electricity. Powerhouses were the structures which housed this electric power-generating equipment. By the 1920s, mines began purchasing electrical power from commercial generating stations. The use of commercial power at mines required Substations to convert high voltage down to a lower, more usable voltage level.

Historically, steam driven electric dynamos generated power for the Nuttallburg Mine. The 1901 West Virginia mine report indicates the Powerhouse consisted of a dynamo, boilers, and 150-horsepower (hp) steam engine. By 1915, the Powerhouse, located near the tibble was upgraded and consisted of two steam engines rated at 150-hp each with boilers, driving dynamos producing a total of 550 volts direct current.¹²⁶ By the 1920s, power for the mine was being purchased from the Virginian Power Company, a commercial generating station, which furnished electricity for many of the mines in the New River Field.

The above ground Substation located west of the main mine portal, was constructed in the 1925-26, during the period of Ford renovations. Another Substation was also built at this time, and was located inside the mine near the center of the electrical load.¹²⁷ (There is no physical evidence to suggest any earlier substations, however the mine site probably had at least one, since the mine had been purchasing power for quite some time.) The Substation has a rather interesting method of construction, employing cut stone to face the exterior, and brick to face the interior. The roof consists of a concrete slab supported by I-beams. This type of fireproof construction was employed to ensure the safety of Nuttallburg employees in the event of a substation explosion (heat could build-up in the electrical equipment and cause explosions). Additionally, West Virginia state law required all mine structures located near mine openings to be of fireproof construction.¹²⁸ The structure measures approximately 21' wide by 15' deep by 13' high. The structure was built on a poured concrete foundation and floor with remnants of the heavy electrical equipment, such as conduit extant in the interior.

The Nuttallburg Substation (and substations in general) was used to "rectify" or convert alternating current (AC) to direct current (DC), and step down the high voltage AC to a lower voltage DC. This conversion was necessary to operate the DC powered haulages, Conveyor and other mine equipment. The original Substation equipment installed during the 1925-26 renovations, was a synchronous-converter which rectified and stepped down the 2,200 (or higher) volt AC to 275 volt DC used at the mine. The synchronous-converter had an automatic control system which maintained a constant AC voltage to the converter, which in turn maintained and regulated the DC voltage, furnishing a constant power level to the operating equipment. In general, earlier substations did not have automatic controls and were manually operated. Manual control could not respond instantaneously to power surges or attenuation, which often resulted in electrical fires or other equipment damage. Automatic control devices also economized in the amount of copper wire used for electrical distribution throughout the mine.¹²⁹

Cap and Powder Houses

Cap and Powder Houses were essential mine structures, housing the black powder (and later permissible powders and other explosives) and detonating caps used to blow down coal. As they housed very volatile products, these structures were situated on the edge of the bench level so that in the event of an explosion, the force of the blast was directed outward, away from the mine.

Historically, Cap and Powder Houses were located at Nuttallburg as they were at all working mines of the period. The 1922 Nuttallburg map shows a Powder House located on the tippie level; however, all vestiges of this structure have been erased. Today, the Cap and Powder Houses are located on the bench level. These structures are located west of the main portal and are built into the hillside below the bench, probably date from the Ford era. The walls of each structure were constructed of concrete block faced with stucco, with a concrete slab roof and steel blast doors. The Cap House is a scaled down version of the Powder House.

Sand Houses

Sand was an important commodity to the mine site, since it was used by both mine haulage and railroad locomotives for extra traction in rainy, icy or snowy conditions. Extra traction was gained by applying sand beneath the drive wheels. The Sand House was used both for drying and storing sand.

There were two Sand Houses at Nuttallburg. The first was located on the bench level adjacent to the Headhouse. This Sand House supplied sand for the mine locomotives and haulage. It was

a low brick structure with a shed roof, and probably dates to the 1920s renovations. It was divided into three areas with a raw sand bin, sand dryer, and dry sand bin.¹³⁰ Today only a concrete pad and some brick walls remain of this Sand House. The pad measures approximately 10' by 45'.

The other Sand House was located near the Tipple at the east end of the coke ovens. Physical and photographic evidence suggests this was a low structure with a shed roof. The Sand House's function was probably similar to its bench level counterpart, except it supplied sand for the locomotives and other rolling stock. Today, the only remaining vestiges are stone walls and a large quantity of sand. These remains measure approximately 43'-0" by 15'-5".

Oil Storage Tank

The oil storage tank is located near the upstream end of the Tipple. Oil was used to spray coal and slack in loaded railroad cars. This served two purposes. First, it kept the coal from freezing; and second, it kept the slack from blowing out of the open car during transportation. Artifactual evidence in the Tipple's Loading Room, in the form of extensive piping and pumps (much like an automobile water pump), further suggests the coal was sprayed with oil as it was being loaded out on the loading booms. The Maryland New River advertised "dustless treatment" for their coal products, and apparently this was the process of oiling down the coal.¹³¹

Company Store

The purpose of the company store is well known. Essentially everything a miner or his family needed from food to clothing and furniture, were available from the company store. However, these goods could be purchased only with company scrip and with automatic deductions from the miner's pay.

The remains of the structure identified as the Nuttallburg Company Store are located on the Tipple level, at the west end of the bank of coke ovens. This structure apparently housed a general store on the ground level and a furniture store on the upper level.¹³² Only the stone walls of the lower level remain and measure approximately 44' by 31'.

The Maryland New River Coal Company Store was located at Edmund, along West Virginia State Route 82 (Ames-Lansing Road), near its junction with Fayette County Road 7. The store was apparently a wood structure. However, today there are no extant remains only an empty lot.¹³³

Miscellaneous Shops and Buildings

There are many miscellaneous buildings generally associated with mine sites. Blacksmith, carpenter, electrical, and machine shops, tool and lamp houses, and a foreman's or mine boss's office were all integral parts of a well-designed mine complex.

Historically, Nuttallburg had both blacksmith and carpenter shops, but there are no extant remains or any indication where these works stood.¹³⁴ The mine undoubtedly had electrical and machine shops. These shops were probably located along the eastern bench past the Headhouse. There are unidentified shop remains at this bench location. The Lamp House, used for miners' lamp storage and repair, was probably located adjacent to the Substation, near the main mine portal. Photographic evidence suggests the Foreman's Office was adjacent to the Substation. This structure was a small, single story wood building.¹³⁵ Artifactual evidence in the form of concrete blocks and a foundation footprint validate the photographic evidence. Additionally, both the Foreman's Office and the Lamp House would have been conveniently located at this site, and could have been combined under one roof.

There was once an entire community at Nuttallburg perched on the walls of the gorge and on the bottom land that included miner housing, two churches, the Nuttall Depot, and many other structures. Apparently company housing was scattered around the Tipple with many of these homes being located downstream from the Tipple and near the coke ovens. Today, very little of Nuttallburg proper still exists. All wood structures have rotted away long ago in the humid climate at the bottom of the gorge, leaving only foundations. Additionally, kudzu, a climbing vine has literally covered the site, making the location of extant cultural remains very difficult. Other than the Tipple, Conveyor, and Headhouse little of Nuttallburg still remains besides a few stone foundations. Some of these ruins have been identified. They include an Ice House, a Club House for miners' social activities (probably the white Club House), and a Well House that once apparently housed a pump for the Nuttallburg water supply and fire hydrant system.¹³⁶

Section 2.4 Transportation

Underground and Surface Haulage

Underground and surface haulage were needed to transport coal cars within a mine and around a mine site. Before the turn of the century, animal power was the traditional system of haulage. Horses or mules were employed to haul the loaded coal cars from the mine works and then return the empties. Later as mining technology evolved, steam and electric locomotives replaced animal power.

Historically at Nuttallburg, mules were used to convey coal within the mine and to the Headhouse. When John Nuttall established the mine, he bought 30 mine mules and hired 25 drivers. As coal mining evolved at Nuttallburg, so did the system of haulage employed at the site.

The advent of locomotives, or in mining vernacular: "motors," were introduced to the Nuttallburg Mine in about 1901. Mine reports for that year describe this locomotive as a "7-1/2 ton electric motor, which brings 24 mine cars per trip, having a capacity of 1-1\6 tons each."¹³⁷ The adoption of locomotives at the mine instituted a period of transition for the system of haulage at Nuttallburg, because the mine continued to use both mules and motors until the advent of the Ford era in 1920. Ford's modernization program spelled the end of the use of mine mules. After Ford acquired the mine, mules were replaced entirely by electric locomotives, both above and below ground.

Two types of locomotives were used in the mines for gathering and haulage. Gathering motors collected loaded mine cars from the rooms, towing them to the main entry and for distributing the empty cars back to the various rooms. Haulage motors were used to tow the gathered mine cars out of the main entry to the headhouse, and to return the empties for redistribution by the gathering motor. Additionally, several electric power sources such as storage batteries, and alternating and direct current (AC/DC) were employed to operate these motors. (Steam and pneumatic motors were employed in other mines, but will not be discussed here.)

The storage battery locomotive was powered by storage batteries of the type used in modern automobiles and motorcycles and when discharged they could be readily recharged. The advantages of this type of power source were that it could be operated without dangerous overhead wires and could operate during periods of power failures. More importantly, battery-type motors were safer in gaseous mines, having no open sparks as with trolley-type motors.

On the other hand, the AC/DC system (generally DC was used more often than AC) often employed trolley-type pickup arrangement, where the live source was connected to the motor via a conductor sheave, which rolled along a suspended wire, and the current grounding through the rails. The disadvantage to this system was if the power failed, the motor stopped running. An additional problem resulted when the rails were not bonded or tightly connected. This caused the ground to fail and the motor would stop dead. Above all, the trolley wires were live, and there was a great probability of electrocution if a miner came in contact with one. Typically, gathering motors were battery-powered and the haulage motors were of the trolley-type.¹³⁸

The 1924 Keystone Coal Mine Directory indicates the

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Nuttallburg Mine was using both storage battery and trolley motors.¹³⁹ Undoubtedly, the storage battery motor cited was used as a gathering motor and the trolley motor for main entry and surface haulage. Today, physical evidence of the trolley system litter the mine site, with remnants of trolley insulators and other electrical paraphernalia abounding. This artifactual evidence substantiates the use of trolley motors at Nuttallburg and seems to indicate they were used up to the time the mine ceased operations.

Hoist House and Mountain Haulage

The Hoist House and Mountain Haulage were used in tandem to move men and supplies from the tippie level to the bench level. The electric winding engine in the Hoist House raised and lowered a car or haulage on an inclined plane, much like a monitor system.

The Hoist House is located above and just west of the main mine portal on the bench level. It has a poured concrete foundation and walls with a corrugated steel shed roof, supported by wooden rafters (now collapsed). This structure is approximately 16'-6" by 13'-0" by 8'-7" tall. The hoisting engine is intact; however, it lacks a manufacturer name plate, thus is not definitely identifiable. The electric powered hoisting engine is of the friction clutch-and-brake type. The Hoist House likely dates from the 1925-26 period of renovations because of its poured concrete construction. Photographic evidence shows that the Hoist House was in use prior to the construction of the steel Headhouse and Retarding Conveyor, and implying it was constructed at the time of these renovations.

The haulage vehicle was raised and lowered with a steel cable that was wound by the hoisting engine. The operator gained access to the Hoist House from steep steps leading up to it. The operator ran the hoisting engine blind, because he could not see the bottom of the gorge, instead relying on a dial gage marked "top" and "bottom." He stopped the engine accordingly. There apparently was a covered station or loading area located at the downstream end of the Tippie.

The Mountain Haulage was single-track inclined plane. It was probably constructed to bring men and supplies from the tippie level at the bottom of the New River Gorge to the bench level. It probably originally served the purpose of bringing men and equipment up the gorge to the bench level during the construction of the Headhouse and Conveyor. Vestiges of the right-of-way can still be found today, but none of the track is extant and no Mountain Haulage vehicle or other artifactual evidence has been found.

Nuttallburg Suspension Bridge

An important engineering achievement at Nuttallburg occurred at the turn of the century: the construction of the Nuttallburg Suspension Bridge, connecting Nuttallburg with South Nuttall, or Browns, on the south side of the New River. The 340-foot pedestrian suspension bridge was constructed in 1899 by the John A. Roebling's Sons Company of New York, the famous bridge company responsible for erecting the Brooklyn Bridge. The Nuttallburg Suspension Bridge featured twin masonry towers constructed of cut stone, with the south tower 22' high and the north tower 16-1/2' high. Each tower is approximately 5'- 3" square at the base. The six-foot wide walkway was suspended from 1-1/4" cables carried on cast iron saddles and anchored at each shore in solid bedrock. The saddles were capped with pyramidal-shaped metal covers. The floor system was further stiffened with wind guys that are also anchored in bed rock.¹⁴⁰

The Nuttallburg Suspension Bridge is no longer extant, having been demolished in the late 1950s. The towers, however still stand and vestiges of the cables and anchorage systems also still remain.

Section 2.5 Conclusions

The decline and closure of the Nuttallburg or Dubree No. 4 mine can be attributed to many causes. The most obvious reason for its closing is that it "blew out," or was worked out. The mine had operated for close to a century and many millions tons of coal had been won. In fact, approximately 4.3 million tons had been mined at Nuttallburg from 1897 to 1958. Department of Mines reports indicate that the seam narrowed through the years, probably reaching a point of diminishing return (the cost of winning the coal exceeded the return or profit on the coal).

The other primary reason for its decline can be traced to the changing social patterns following the Second World War. Rural youth no longer were staying in their old established communities and were moving to urban industrial areas in search of better paying jobs. Improved roads made it possible for rural youth to move easily to other communities far away from the New River Gorge.

Markets for coal were also declining due to the dieselization of the railroad industry. The advent of dieselization effectively ended the day of the steam locomotives and therefore, their need for coal. Also an important factor was the New River Field was in general decline with the Fire Creek and Sewell seams being worked out and causing county production to fall.

Additional factors include the widespread mechanization of the mining industry which led to fewer jobs for miners. Still, the Nuttallburg Mine and the Fayette County mines production had at one time dominated all other mines in West Virginia, reaching their pinnacle and then declining with no chance of recovery.

Section 2.6 Call for Further Research

The reader should bear in mind that while the Nuttallburg Mine began operations around 1873, information about the early years of the mine's operation is sketchy at best due to the unavailability of written material on the mine and the lack of industry trade journals. Additionally, information available about the Maryland New River era is also incomplete at best, as is also the case with the Garnet Coal Company era. However, the Ford era was much better documented, because of Ford's high profile and the shock wave sent through the coal industry, when he began to purchase mine properties. Consequently this report focuses largely on the Ford era. Clearly there is a need for further research. This research should take the following form.

Oral History

There is an immediate need to initiate the collection of oral histories of former Nuttallburg employees. These men are now in their august years and their time is running out. They need the opportunity to tell their stories. These oral histories should focus not only on the Nuttallburg mine technology (for instance how the coal was extracted or the Tipple's operation), but also their life experiences at Nuttallburg both in the mine and in the town. This collection of oral histories would then be added to the New River Gorge Oral History Collection at Glen Jean.

Nuttallburg

More research is required to document the corporate aspect of Nuttallburg, particularly on the very early and very late years of the mine's operation. Further documentation of the Nuttall years may be virtually impossible, unless some new materials are unearthed from someone's basement or in some forgotten collection. The research on the later years would be much easier to obtain, from former Nuttallburg employees. Oral histories would greatly strengthen this body of research.

New River Field History

There is a definite need for a comprehensive history of the New River Field. The foundation of this work has already been laid with HAER's Kaymoor Recording Project and the Nuttallburg Recording. Additionally, scholarly work has been undertaken in the writing of the New River Series focusing on the towns of Kaymoor, Sewell, and Thurmond.

Technological History

This paper is fairly comprehensive insofar as documenting the technology of the Nuttallburg site, but further research would be welcomed to enhance and supplement the information already found. This research might examine other types of mining technology not discussed in this paper. From this research would be developed a contextual history of coal mining technology. This contextual history might be used by cultural resource surveyors, HAER teams or anyone else that would need a body of information to help identify or recognize various types of coal technologies.

Section 2.7 Appendices

Appendix I

Property situated at the Keeney's Creek and Nuttallburg mines.
From deed recorded in Fayette County Deed Book 27, p. 58.

1-Store House
3-Houses at Nuttallburg
11-Double Houses at Nuttallburg
20-Single Houses at Nuttallburg
13-Single Houses at Nuttallburg
3-Single Houses at Nuttallburg
23-Single Houses at Nuttallburg
1-Single House at Nuttallburg (Mine Boss)
1-Single House at Nuttallburg (Doctor's)
1-Stone Powder House
1-Hay House
1-Brick House
1-Corn house
2-Stables
1-Work Shop
1-Scale House and Scale
1-Blacksmith Shop
1-Tipple and Trestle
3-House, New, on Mountain
1-Pump and Boiler
Water Pipes, Hydrants and Reservoirs
1-Fan, Boiler and Houses, New
1-Electric Plant, Complete
80-Coke Ovens
220-Bank Cars
32-Mules
1-Vault
2-Marvin Safes
2-Drums and Ropes and Houses
2-Jeffrey Mining Machines
1-Tipple, Keeney's Creek
1-Steel Rail, Tools, etc.
1-Scale House and Scale; Blacksmith Shop
6-Houses (Double) Keeney's Creek
12-Houses..(Single) Keeney's Creek
1-Stable
1-House
Side Tracks and Inclines and Tramways
Merchandise and Fixtures in Store

Appendix II

NUTTALLBURG COAL PRODUCTION 1883-1958
(Tons 2,000 lbs)

| YEAR | 1ST 6 MO | 2ND 6 MO | TOTAL | FAYETTE CO | W.VIRGINIA |
|--|-------------------------------------|----------|---------|------------|-------------|
| 1870 | | | | - | 608,878 |
| 1871 | | | | - | 618,830 |
| 1872 | | | | - | 700,000 |
| 1873 | Nuttallburg Mine Opens/C&O Finished | | | | 672,000 |
| 1874 | First Year C&O Opened | | | | 1,120,000 |
| 1883 | - | - | 46,552 | - | 3,142,233 |
| No Production Data For The Years 1884-1896 | | | | | |
| 1897 | 44,911 | 42,430 | 87,341 | 3,352,228 | 13,110,528 |
| 1898 | 40,228 | 38,100 | 79,224 | 4,435,498 | 15,931,849 |
| 1899 | 41,276 | 39,271 | 80,574 | 4,980,045 | 18,200,168 |
| 1900 | 14,549 | 17,726 | 32,275 | 5,092,642 | 21,153,340 |
| 1901 | 27,841 | 36,285 | 64,126 | 6,020,786 | 22,724,801 |
| 1902 | 30,735 | 26,584 | 57,319 | 6,411,868 | 26,162,173 |
| 1903 | 9,295 | 46,472 | 55,767 | 4,564,363 | 25,663,342 |
| 1904 | 15,355 | 20,335 | 35,690 | 6,328,243 | 30,222,881 |
| 1905 | 20,888 | 22,643 | 43,531 | 7,546,944 | 35,283,392 |
| 1906 | 16,503 | 21,474 | 37,977 | 8,540,940 | 41,891,891 |
| 1907 | 18,847 | 23,046 | 41,894 | 8,150,573 | 38,125,148 |
| 1908 | 19,927 | 38,546 | 58,473 | 7,673,424 | 44,091,051 |
| 1909 | 32,870 | 36,307 | 69,076 | 8,509,477 | 45,577,018 |
| 1910 | 19,361 | 24,911 | 44,272 | 10,516,327 | 59,274,553 |
| 1911 | 24,549 | 27,031 | 51,580 | 10,101,722 | 60,517,168 |
| 1912 | 23,746 | 25,833 | 49,579 | 9,869,505 | 66,731,587 |
| 1913 | 30,238 | 30,180 | 60,417 | 10,169,440 | 69,182,794 |
| 1914 | 23,183 | 21,830 | 45,013 | 9,729,427 | 73,677,059 |
| 1915 | 23,694 | 33,832 | 57,525 | 8,827,697 | 71,812,918 |
| 1916 | 32,901 | 33,599 | 66,500 | 11,611,606 | 89,165,774 |
| 1917 | 30,399 | 27,092 | 57,491 | 10,702,180 | 89,383,450 |
| 1918 | 27,303 | 26,001 | 53,304 | 9,887,459 | 90,766,637 |
| 1919 | 26,880 | 27,199 | 54,079 | 9,030,549 | 84,980,552 |
| 1920 | 13,785 | 13,048 | 26,833 | 9,752,973 | 89,590,271 |
| 1921 | 27,240 | 23,692 | 50,932 | 9,842,260 | 90,452,996 |
| 1922 | Nuttallburg Mine Closed | | | 5,795,423 | 79,394,786 |
| 1923 | - | 10,665 | 10,665 | 9,284,255 | 97,475,177 |
| 1924 | 50,903 | 40,239 | 91,142 | 8,502,126 | 103,325,960 |
| 1925 | 70,945 | 169,875 | 240,820 | 14,888,267 | 176,306,656 |
| 1926 | - | - | 175,443 | 12,638,435 | 144,603,574 |
| 1927 | - | - | 187,268 | 12,666,435 | 146,088,121 |
| 1928 | - | - | 58,153 | 12,528,903 | 133,866,587 |
| 1929 | - | - | 171,125 | 13,034,029 | 139,297,146 |
| 1930 | - | - | 163,284 | 11,766,331 | 122,429,767 |
| 1931 | - | - | 111,415 | 10,840,689 | 102,608,420 |
| 1932 | - | - | 49,549 | 9,397,277 | 86,114,506 |
| 1933 | - | - | 42,616 | 9,993,035 | 94,130,508 |
| 1934 | - | - | 87,966 | 11,211,243 | 98,441,233 |

| YEAR | 1ST 6 MO | 2ND 6 MO | TOTAL | FAYETTE CO | W.VIRGINIA |
|------|-------------------------|----------|---------|------------|-------------|
| 1935 | - | - | 112,846 | 11,329,307 | 99,810,908 |
| 1936 | - | - | 128,954 | 12,985,036 | 118,131,202 |
| 1937 | - | - | 93,787 | 12,851,148 | 118,965,066 |
| 1938 | - | - | 63,705 | 11,040,228 | 93,511,099 |
| 1939 | - | - | 89,125 | 11,076,244 | 108,515,665 |
| 1940 | - | - | 48,503 | 12,476,296 | 126,619,825 |
| 1941 | - | - | 123,519 | 13,253,414 | 140,944,744 |
| 1942 | - | - | 115,194 | 13,825,055 | 156,752,598 |
| 1943 | - | - | 119,895 | 13,885,684 | 160,429,576 |
| 1944 | - | - | 102,128 | 13,873,998 | 164,954,218 |
| 1945 | - | - | 67,096 | 12,573,940 | 151,909,714 |
| 1946 | - | - | 62,138 | 12,229,011 | 143,977,874 |
| 1947 | - | - | 72,047 | 15,171,500 | 173,653,816 |
| 1948 | - | - | 69,273 | 14,027,646 | 168,589,033 |
| 1949 | - | - | 49,164 | 10,158,544 | 122,913,540 |
| 1950 | - | - | 58,793 | 11,131,109 | 145,563,295 |
| 1951 | - | - | 75,631 | 12,419,992 | 163,418,001 |
| 1952 | - | - | 55,411 | 10,452,862 | 142,181,271 |
| 1953 | Nuttallburg Mine Closed | | | 8,080,750 | 131,872,563 |
| 1954 | - | - | 25,469 | 5,775,495 | 113,039,046 |
| 1955 | - | - | 11,739 | 7,253,158 | 137,037,372 |
| 1956 | - | - | 17,708 | 7,555,490 | 150,401,233 |
| 1957 | - | - | 14,107 | 6,569,359 | 150,220,548 |
| 1958 | - | - | 4,702 | 4,580,217 | 115,245,791 |
| 1959 | Nuttallburg Mine Closed | | | 4,462,768 | 117,770,002 |
| 1960 | Permanently | | | 4,402,741 | 120,107,994 |

Statistics from West Virginia Department of Mines Annual Reports for the years 1883 and 1895 to 1960. 1870-74 statistics from 1958 Annual Report.

The statistics for the year 1883, 1895 to 1924 have been adjusted to be consistent with the 1925 to 1960 statistics and are in tons (2,000 lbs) rather than in long tons (2,240 lbs), as they were reported in for those years.

After 1926, only annual tonnage was reported.

The 1870-74 and 1959-60 statistics are included for comparison and are indicative of the rise and decline of the New River Field.

Appendix III

NUTTALLBURG COKE PRODUCTION
(TONS 2,240 lbs)

| YEAR | 1ST 6 MON | 2ND 6 MON | TOTAL | NO OVENS | DAYS OPER |
|------|------------------------------------|-----------|--------|----------|-----------|
| 1883 | - | - | 15,378 | 51 | - |
| 1897 | 10,578 | 6,070 | 16,648 | 84 | 200 |
| 1898 | 9,200 | 9,200 | 18,400 | - | - |
| 1899 | 9,448 | 8,400 | 17,848 | 72/60 | 300 |
| 1900 | - | - | 10,603 | 72/39 | 268 |
| 1901 | 4,346 | 4,956 | 9,302 | 72/48 | 365 |
| 1902 | - | - | - | 72/0 | 0 |
| 1903 | - | 3,500 | 3,500 | 72/35 | 150 |
| 1904 | - | - | - | 85/0 | 0 |
| 1905 | - | 1,371 | 1,371 | 85/30 | - |
| 1906 | - | - | - | 85/0 | 0 |
| 1907 | - | - | - | 85/0 | 0 |
| 1908 | 1,344 | 1,095 | 2,439 | 85/50 | - |
| 1909 | - | - | - | - | - |
| 1910 | - | 750 | 750 | 52/14 | 90 |
| 1911 | 3,500 | 5,400 | 8,900 | 75/50 | 240 |
| 1912 | 3,390 | - | 3,390 | 50/50 | 130 |
| 1913 | 2,750 | 3,750 | 6,500 | 50/42 | 220 |
| 1914 | 4,044 | 3,030 | 7,074 | 50/39 | 280 |
| 1915 | - | - | - | 50/0 | 0 |
| 1916 | 778 | 7,207 | 7,985 | 65/46 | 140 |
| 1917 | 4,624 | 4,285 | 8,909 | 50/40 | 120 |
| 1918 | 4,375 | 4,357 | 8,732 | 50/50 | - |
| 1919 | 5,344 | 2,527 | 7,871 | 50/50 | 50 |
| 1920 | End of Nuttallburg Coke Production | | | | |

Statistics from 1883 and 1895 to 1920 West Virginia Department of Mines Annual Reports.

Days Oper=The number of days in the year the coke ovens were in blast.

Appendix IV

FORD ERA PRODUCTION
NUTTALLBURG MINE vs TWIN BRANCH MINES
(Tons 2,000 lbs)

| | NUTTALLBURG | TWIN BRANCH |
|------|-------------|-------------|
| YEAR | TOTAL | TOTAL |
| 1923 | 10,665 | 228,165 |
| 1924 | 91,142 | 243,225 |
| 1925 | 240,820 | 423,856 |
| 1926 | 175,443 | 319,297 |
| 1927 | 187,268 | 331,454 |
| 1928 | 58,153 | 443,929 |

Twin Branch Mine No. 1, 2, 3, 4, & 5 were located in McDowell County, West Virginia in the Pocahontas Field. Tonnage reported are the combined production of Mine's No. 1, 2, 3, 4, & 5.

The 1923-24 figures have been adjusted to tons to be consistent.

Appendix V

NUTTALLBURG EMPLOYMENT STATISTICS

| YEAR | INSIDE EMP | OUTSIDE EMP | COKE WORKERS | SUPERVR | TOTAL EMP | DAYS OPER |
|--|---|----------------|--------------|---------|--------------|--------------|
| 1883 | 61 | 20 | - | - | 81 | - |
| No Production Data For The Years 1884-1895 | | | | | | |
| 1896 | 132 | 18 | 30 | - | 180 | - |
| 1897 | 160 | 17 | 45 | - | 205 | 212 |
| 1898 | No Employment Statistics Reported | | | | | |
| 1899 | 85 | 10 | 18 | - | 103 | 220 |
| 1900 | 87 | 16 | 22 | - | 125 | 210 |
| 1901 | 81 | 9 | 14 | - | 104 | 226 |
| 1902 | 81 | 8 | - | - | 89 | 230 |
| 1903 | 119 | 9 | 15 | - | 143 | 180 |
| 1904 | 74 | 8 | - | - | 82 | 186 |
| 1905 | 53 | 7 | 7 | - | 67 | 180 |
| 1906 | 57 | 7 | - | - | 64 | 206 |
| 1907 | 65 | 7 | - | - | 72 | 203 |
| 1908 | 78 | 8 | 10 | - | 96 | 212 |
| 1909 | 106 | 10 | - | - | 116 | 179 |
| 1910 | 50 | 10 | 5 | - | 65 | 240 |
| 1911 | 74 | - | - | - | 74 | 240 |
| 1912 | 73 | 12 | 15 | - | 100 | 240 |
| 1913 | 71 | 13 | 11 | - | 95 | 275 |
| 1914 | 61 | 11 | 9 | - | 81 | 253 |
| 1915 | 79 | 11 | - | - | 90 | 241 |
| 1916 | 60 | 10 | 12 | - | 82 | 264 |
| 1917 | 71 | 26 | 20 | - | 117 | 114 |
| 1918 | 55 | 21 | - | - | 76 | 240 |
| 1919 | 60 | 7 | 2 | - | 69 | 270 |
| 1920 | 45 | 8 | - | - | 53 | 121 |
| 1921 | 82 | 13 | - | - | 95 | 202 |
| 1922 | mine closed | | | | | |
| 1923 | 99 | 26 | - | - | 125 | 52 |
| 1924 | 113 | 17 | - | - | 130 | 167 |
| 1925 | 170 | 15 | - | - | 185 | 279 |
| 1926 | 189 | 30 | - | - | 219 | 255 |
| 1927 | 198 | 30 | - | - | 228 | 262 |
| 1928 | 142 | 10 | - | - | 152 | 267 |
| 1929 | From 1929 to 1934 Employment Statistics | | | | | |
| 1930 | Were Reported by County and Not By Mine | | | | | |
| 1931 | | | | | | |
| 1932 | | | | | | |
| 1933 | | | | | | |
| 1934 | | | | | | |
| 1935 | | | | - | 134 | 194 |
| 1936 | 170 | 11 | - | - | 181 | 215 |
| 1937 | 160 | 13 | - | - | 173 | 152 |
| 1938 | 83 | 9 | - | - | 92 | 154 |

| YEAR | INSIDE EMP | OUTSIDE EMP | COKE WORKERS | SUPERVR | TOTAL EMP | DAYS OPER |
|------|-----------------------------------|----------------|--------------|---------|--------------|--------------|
| 1939 | 110 | 12 | - | - | 122 | 189 |
| 1940 | 94 | 11 | - | - | 105 | 113 |
| 1941 | 121 | 10 | - | - | 131 | 224 |
| 1942 | 114 | 12 | - | - | 126 | 241 |
| 1943 | 89 | 10 | - | 5 | 104 | 286 |
| 1944 | 74 | 10 | - | 3 | 87 | 296 |
| 1945 | 53 | 9 | - | 4 | 66 | 285 |
| 1946 | 50 | 8 | - | 4 | 62 | 240 |
| 1947 | 65 | 8 | - | 5 | 80 | 265 |
| 1948 | 67 | 11 | - | 5 | 83 | 239 |
| 1949 | 69 | 10 | - | 4 | 83 | 163 |
| 1950 | 72 | 10 | - | 6 | 88 | 183 |
| 1951 | 72 | 10 | - | 7 | 89 | 237 |
| 1952 | 81 | 10 | - | 7 | 98 | 175 |
| 1953 | Mine Closed | | | | | |
| 1954 | No Employment Statistics Reported | | | | | |
| 1955 | 28 | 2 | - | 3 | 33 | 87 |
| 1956 | 26 | 3 | - | 3 | 32 | 130 |
| 1957 | 22 | 3 | - | 3 | 28 | 95 |
| 1958 | 22 | 2 | - | 2 | 26 | 56 |

Employment Statistics from the West Virginia Department of Mines Annual Reports for 1883 and 1895 to 1958.
 Production of coke at Nuttallburg ceased after 1920.
 Days Oper=the number of days the mine operated

Appendix VI

PICK PRODUCTION VERSUS MACHINE PRODUCTION
(Tons 2,000 lbs)

| YEAR | TOTAL PICK | No. PICK MINERS | TOTAL MACH | No. MACHS | No. MACH MINERS |
|-------|--|-----------------|-------------|-----------|-----------------|
| 1901 | 57,784 | 45 | 6,341 | 2 | 12 |
| 1902 | 48,304 | 45 | 9,015 | 2 | 10 |
| 1903 | 47,340 | 75 | 8,427 | 2 | 10 |
| 1904 | 17,845 | 30 | 17,845 | 2 | 20 |
| 1905 | 41,182 | 37 | 2,349 | 2 | 3 |
| 1906 | 33,356 | 30 | 4,621 | 2 | 10 |
| 1907 | 27,383 | 30 | 14,511 | 3 | 20 |
| 1908 | 29,236 | 35 | 29,236 | 4 | 25 |
| 1909 | 47,229 | 60 | 21,948 | 4 | 25 |
| 1910 | 14,757 | 15 | 29,515 | 4 | 16 |
| 1911 | 20,633 | 16 | 30,948 | 4 | 20 |
| 1912 | 23,668 | 21 | 25,911 | 2 | 18 |
| 1913 | 13,589 | 20 | 46,828 | 5 | 29 |
| 1914 | 15,300 | 15 | 29,712 | 5 | 25 |
| 1915 | 24,881 | 24 | 32,645 | 6 | 28 |
| 1916 | 23,122 | 23 | 34,379 | 6 | 11 |
| 1917 | 21,280 | 28 | 36,211 | 6 | 12 |
| 1918 | 17,395 | 6 | 35,909 | 5 | 20 |
| 1919 | 2,704 | 5 | 51,376 | 5 | 32 |
| 1920 | No Pick Mining Reported | | 26,833 | 3 | 23 |
| 1921 | 1920-23 | | 50,932 | 4 | 42 |
| 1922 | | | mine closed | | |
| 1923 | | | 10,665 | 7 | 54 |
| 1924 | 385 | - | 90,757 | 9 | 63 |
| 1925 | 17,880 | 16 | 151,995 | 7 | 70 |
| 1926 | 43,860 | 14 | 131,583 | | 81 |
| 1927 | - | 12 | 187,268 | | 80 |
| 1928 | 1,153 | 10 | 58,153 | | 90 |
| 1929* | 3,359 | | 167,766 | | |
| 1930 | 1,821 | | 161,463 | | |
| 1931 | 1,217 | | 110,198 | | |
| 1932 | 475 | | 49,074 | | |
| 1933 | 447 | | 42,169 | | |
| 1934 | 1,592 | | 86,374 | | |
| 1935 | 2,348 | | 110,498 | | |
| 1936 | the apparent end of pick mining at Nuttallburg | | | | |

Statistics from the West Virginia Department of Mines Annual Reports for the years 1901 to 1936.

* No individual mine employment statistics reported for the years 1929 to 1935.

No. Pick Miners=the number of pick miners employed.

No. Mach=the number mining machines employed at the mine.

No. Mach Miners=the number of mining machine operators.

ENDNOTES

1. I.C. White, et al, West Virginia Geological Survey: Fayette County (Wheeling, W.Va.: Wheeling News Litho Co., 1919), p.1, p.19.
2. Ibid, p. 19, p. 84.
3. Ibid, p. 42-43.
4. J. T. Peters and H. B. Carden, History of Fayette County, West Virginia (Charleston, W.Va.: Jarrett Printing Co., 1926), pp. 1-4.
5. Peters and Carden, Fayette County, p. 26.
6. Alan Vance Briceland, Westward from Virginia: The Exploration of the Virginia-Carolina Frontier, 1650-1710 (Charlottesville, VA: University Press of Virginia, 1987), pp. 124-146. This is an excellent re-examination of the early interpretations of the explorations of Virginia, West Virginia and the Carolina's and refutes many of these earlier interpretations. Wood, Batts, and Fallam are often credited with discovering the Falls of the Great Kanawha and other Fayette County features, but Briceland's book refutes these claims.
7. Otis K Rice, West Virginia: A History (Lexington, KY: University of Press Kentucky, 1985), pp. 19-20; and Peters and Carden, Fayette County, pp. 79-80.
8. Peters and Carden, Fayette County, pp. 80-82.; and Anthony F.C. Wallace, The Death and Rebirth of the Seneca (New York: Vintage Books, 1972), pp. 122-23.
9. Peters and Carden, Fayette County, pp. 85-99; and Helen Vogt, Westward of ye Laurall Hills 1750-1850 (Parsons, WV: McClain Printing Co., 1976), pp. 47-48.
10. Peters and Carden, Fayette County, pp. 4-5.
11. George Washington also proposed the construction of the Potomac Canal which ultimately became the Chesapeake and Ohio Canal. Washington spearheaded the construction of skirting canals around the Great Falls of the Potomac, at Harper's Ferry and other places with rapids in an attempt to improve navigation on the Potomac River. Today, remnants of this early canal can be found on the Virginia side of the Potomac River.

12. James J. Kirkwood, Waterway to the West (Washington, D.C.: Eastern National Park and Monument Association, 1963), pp. 6-15. The Richmond to Buchanan canal featured 37 miles of slack water, 23 feeder dams, 12 aqueducts, 198 culverts, 135 bridges (carrying roads over the canal), and 90 lift locks that overcame 728 feet in elevation. The first 146 miles from Richmond to Lynchburg cost \$39,982 per mile and \$48,451 per mile from Lynchburg to Buchanan. See above pp. 14-15.

13. White, Fayette County, p. 16.

14. Indeed, the story of the Civil War in West Virginia can be traced to its system of turnpikes, with virtually all engagements occurring along the turnpikes and where the turnpikes passed through gaps, because of the ruggedness of the region. Additionally, railroad junctions and right of ways were also the scenes of much action in West Virginia.

15. Kirkwood, Waterways, p. 14.

16. Eugene L. Huddleston, Riding That New River Train (Alderson, WV: The Chesapeake and Ohio Historical Society, Inc.), pp. 11-13; and White, Fayette County, pp. 10-11.

17. Peters and Cardin, Fayette County, p. 252.

18. The Sewell seam is contained in the Pennsylvania Series of the Pottsville Formation and the New River Group. The general analysis of Sewell coal is: Moisture-0.75; Volatile Matter-19.90; Fixed Carbon-76.15; Ash-3.20; Sulfur-0.80; B.t.u.-15,130.

19. Peters and Cardin, Fayette County, pp. 252-53.

20. Peters and Cardin, Fayette County, pp. 253-257.

21. Joseph L. Buery was forced to leave the Pennsylvania fields due to trouble with the "Molly McGuires" who were trying to organize the Pennsylvania fields following the Civil War.

22. W.P. Tams, The Smokeless Coal Fields of West Virginia: A Brief History (Morgantown, WV: West Virginia University Foundation, 1983), pp. 78-79; and Peters and Cardin, Fayette County, pp. 258-60.

23. A tierboy was probably responsible for tying threads broken during the thread making process. This was a very hazardous job that required the worker to climb under and around moving textile machinery. Waifs and orphans were often hired for this task.

24. John Nuttall, "The Life of John Nuttall" (New River Gorge National River: Unpublished Manuscript, nd), p. 1. New River Gorge National River Park Headquarters Library, Glen Jean, West Virginia.

25. Nuttall, "Nuttall", pp. 1-2.

26. George H. Burgess and Miles C. Kennedy, Centennial History of The Pennsylvania Railroad Company (Philadelphia: The Pennsylvania Railroad Co., 1949), pp. 111-12; and William B. Sipes, The Pennsylvania Railroad: Its Origin, Construction, Condition, and Connections (Philadelphia: The Passenger Department, 1875), pp. 209-11. Sipes book lists each stop of the Tyrone and Clearfield Railroad with a description and includes a Powelton.

27. In general, coal from the Kittanning (B) or "Miller" seam was mined in this region. Coal from the Miller seam is a low moisture and high fixed carbon coal, much like coal from the Sewell seam, and was used for both coking and as steam coal. See Blair County and Cambria County, Pa.: An Inventory of Historic Engineering and Industrial Sites.

28. Nuttall, "Nuttall," pp. 2-3. Powelton, Pennsylvania still exists today and is located in the southwest corner of Centre County. Powelton was sixteen miles from Tyrone via rail. See Sipes, Pennsylvania Railroad, p. 211 for a very short description of Powelton.

29. Moshonnan Creek flows north and is a tributary of the west branch of the Susquehanna River. Moshonnan Creek was the center of extensive mining activity during the nineteenth century and the early twentieth century. The Moshonnan bed was extensively mined during this period as it is high quality steam coal. See The Coal Catalog Combined With Coal Field Directory for the Year 1922 (Pittsburgh: Keystone Consolidated Publishing Co. Inc., 1922), p. 707.

30. Presumably these mines were located in Decatur Township, Clearfield County. Clearfield County maps indicate Little Laurel and Laurel runs, that are a tributary of Moshonnan Creek and are located in Decatur Township. Additionally, the 1922 Keystone Coal Field Directory lists a Laurel Run Coal Company in Clearfield County with a Laurel Run No. 1 Mine. See "Laurel Run Coal Company," Coal Field Directory for the Year 1922, pp. 822-23.

31. Nuttall, "Nuttall," pp. 3-4.

32. The literature does not indicate from where Nuttall departed on his journey to the Kanawha coal fields.

33. Nuttall, "Nuttall," pp. 4-5.

34. Nuttall, "Nuttall," p. 5.

35. Nuttall, "Nuttall," pp. 5-6.

36. Grantee Index to Deeds M,N,O: 1831-1926, Fayette County, West Virginia, p. 55.2. Fayette County Courthouse, Fayetteville, West Virginia.

37. Fayette County Deed Book G, p. 602.

38. There are some discrepancies about which mine opened first. The author believes the Keeney's Creek mine was opened first followed by the Nuttallburg Mine. However, the Nuttallburg Mine is often credited with opening first. The author's title research seems to indicate that the Keeney's Creek mine was opened first and this research is what the author bases his conclusions on. To further confuse the issue, the mines were known collectively as the Nuttallburg Mine during their early years of operation.

39. John Nuttall, Trees Above, with Coal Below (San Diego: Neyenesch Printers, 1961), pp. 57-66.

40. Nuttall, "Nuttall," p. 7.

41. Nuttall, "Nuttall," pp. 7-8.

42. Huddleson, Riding, p. 74.; and Everett Young, "Tracking C&O's Past: A Trip Down Keeney's Creek," C&O Historical Newsletter, January 1979. This branch line went out of service in the early 1960s and the track was taken up in the early 1970s. The right-of-way of this branch is still used by local sportsman to reach the New River at Nuttallburg, and the recording team traversed it many times to record the Nuttallburg Tipple during the summer of 1991.

43. "How John Nuttall Developed the Keeney's Creek Section," The State Sentinel, 6 February 1952, p. 4; and Nuttall, "Nuttall," pp. 8-9.

44. Fayette County Deed Book 27, p. 58-60. The Fayette County court records do not list any articles of incorporation for the Nuttallburg Coal and Coke Company, a corporation, so it was probably incorporated in Kanawha County.

45. Fayette County Deed Book 33, pp. 526-28.

46. William Deegans, a native Ohioan, was a renown West Virginia capitalist with a long and distinguished career in the coal mining industry. Deegans came to Fayette County in 1895 to work for the C&O Railroad. By 1900, Deegans was in the general mercantile business. In 1908, Deegans helped organize the Pocahontas Smokeless Coal Company at Welch, West Virginia. This was the first of many coal concerns organized by Deegans, which included the Nuttallburg Smokeless Fuel Company. See "William E. Deegans," in James Callahan, History of West Virginia: Old and New and West Virginia Biography, Vol II (Chicago: The American Historical Society, Inc., 1923), pp. 422-23.

47. Fayette County Deed Book 38, pp. 430-31.
48. Coal Age 10 (1912): 1057.
49. "Mining News," Fayette Tribune, 29 July 1920, p. 1. This author was unable to locate any deed transactions which document this acquisition, although it is common knowledge that the Ford interests purchased the mine.
50. Allan Nevins and Frank Ernest Hill, Ford: Expansion and Challenge, 1915-1933 (New York: Charles Scribner's Sons, 1957), pp. 214-26. Ford sold the D,T&I in 1928.
51. The Ford Industries: Facts About the Ford Motor Company and its Subsidiaries (Detroit: Ford Motor Company, 1924), p. 6.
52. "Charleston, W.Va.," Coal Age 19 (1918): 920. It is not clear if in fact Ford ever purchased this property.
53. "Henry Ford Visits His Nuttall Mine," Fayette Tribune, 20 October 1921.
54. "Ford Mines See Changes," Ford News 1 July 1923, p. 1.
55. "West Virginia," Coal Age 17(1922): 699.
56. "West Virginia," Coal Age 18(1922): 741. The Keeney's Creek Collieries Company was sold to the Maryland New River Company in the spring of 1917. See Coal Age, 14 April 1917, p. 686.
57. "West Virginia," Coal Age 21(1922): 861.
58. "West Virginia," Coal Age 26(1922): 1062. In the same Coal Age notice, stated that a new opening was to be driven on Keeney's Creek and a new tippie constructed there, however this must relate to Maryland New River's operation of the Keeney's Creek mine and not the Nuttallburg Mine.
59. "West Virginia," Coal Age 20(1922): 821. Additionally, Ford purchased coal property at Pond Creek in Pike County, Kentucky in early 1923. See Coal Age 4 January 1923.
60. "Ford Finds a \$15,000,000 Coal Company," The New York Times, 10 February 1923, p. 1; and "Ford Organizes \$15,000,000 Coal Company," Coal Age 4 (1923): 309.
61. "West Virginia," Coal Age 6 (1923): 281.
62. "West Virginia," Coal Age 19 (1923): 725; and Coal Age 25 (1924): 339. The equipment installed at the Twin Branch tippie was identical to that of the Roberts and Schaefer equipment installed at Nuttallburg, i.e., Marcus screens and RandS loading booms.

Ironically, the Twin Branch mine also had a retarding conveyor installed, a harbinger of things to come at Nuttallburg. see Coal Age 26 (1924): 636.

63. Roberts and Schaefer Company confirmed that this type of equipment was installed at the Nuttallburg tipple under contract No. 2346, but were unable to furnish any additionally information. Letter from Paul D. Henze, Supervisor Engineering Services and Records Department, Roberts and Schaefer Company to the author, dated 13 August 1991.

64. "West Virginia," Coal Age 9 (1924): 339; and Coal Age 18 (1924): 636.

65. "West Virginia," Coal Age 19 (1925): 652.

66. "West Virginia," Coal Age 15 (1926): 549; and Coal Age 16 (1926): 583.

67. "Installation Provides Data on Lessened Breakage Incurred with Rope-and-Button Conveyor," Coal Age 18 (1927): 629-30. This an article discussing Ford's improvements at Nuttallburg and included are views of the Headhouse and Conveyor under construction, as well as other views.

68. Fayette County Deed Book 67, pp. 370-372; and "Ford Sells Nuttallburg Mine to Md-New River Co.," Fayette Tribune, 8 August 1928, p. 1.

69. Keystone Coal Buyers Catalog 1929 (New York: McGraw-Hill Catalog and Directory Co., 1929), p. 709.

70. 1950 Keystone Coal Buyers Manual Including Directory of Mines (New York: McGraw-Hill Publishing Co., Inc., 1950), p. 610.

71. "Charleston, W.Va.," Coal Age 15 (1917): 686.

72. "Maryland New River Coal Co.," Coal Field Directory for the Year 1922, pp. 1036-37.

73. Frank B. King, Chief, submitted by Julius C. Olzer, Acting Chief, State of West Virginia Annual Report of the Coal Mining Section Department of Mines January-December 1954 (n.p.: 1956), p. 17.

74. First Annual Report of the State Inspector of Mines to the Governor of the State of West Virginia for the Year 1883 (Wheeling, W.Va.: Charles H. Taney, State Printer, 1884), Table II.

75. John Cavalier, Panorama of Fayette County (Parsons, WV: McClain Printing Co., 1985), p. 336.

76. Nuttall, "Nuttall," p. 6. Edmund Post Office is still in existence as of 1991, as well as the town of Edmund.
77. Fayette County Deed Book 27, p. 58.
78. The original of this map is located at the offices of Pentree Resources, Princeton, West Virginia. The original title block was cut out and replaced with a Maryland New River Coal Company title block. The Nuttallburg Smokeless Fuel Company and or Ford was probably responsible for making the original map.
79. Jones, James B. "Buck." Interview by Paul Nyden, 23 October 1980, Oral History Collection, West Virginia and Regional History Collection (WVRHC), West Virginia University, Morgantown, West Virginia. This interview was part of a series of interviews conducted to document life in the New River Gorge and was undertaken by the New River Gorge National River Park.
80. Nuttall, Trees, pp. 67-69.
81. Keith Dix, Work Relations in the Coal Industry: The Hand Loading Era, 1880-1930 (Morgantown, WV: West Virginia University, 1977), pp. 8-14.
82. Dix, Hand Loading, pp. 16-21.
83. James W. Paul, Chief Mine Inspector, Nineteenth Annual Report Coal Mining in the State of West Virginia, U.S.A. for the Year Ending June 30, 1901 (Charleston, W.Va.: The Tribune Co., Printer, 1901), p. 27.
84. Keith Dix, What's a Coal Miner to Do? : The Mechanization of Coal Mining (Pittsburgh: University of Pittsburgh Press, 1988), pp. 40-41.
85. West Virginia Mine Reports 1883 to 1920.
86. R.M. Lambie, Chief Mine Inspector, West Virginia, U.S.A. Annual Report of the Department of Mines for the Fiscal Year Ending June 30, 1920 (Charleston, W.Va.: The Tribune Printing Co. 1921), p. 84.
87. R.M. Lambie, Chief Mine Inspector, West Virginia, U.S.A. Annual Report of the Department of Mines for the Fiscal Year Ending June 30, 1921 (Charleston, W.Va.: The Tribune Printing Co., 1922), p. 88.
88. R.M. Lambie, Chief Inspector of Mines, West Virginia, U.S.A. Annual Report of the Department of Mines 1930 (n.p., 1931), p. 57.
89. Jones, interview, 23 October 1980.

90. Dix, Coal Miner, p. 188.
91. Dix, Coal Miner, pp. 181-190. Jones interview by Nyden, 23 October 1980. Mr. Jones states that Nuttallburg was organized in 1930 or 1933, but clearly the 1933 date is more accurate.
92. Dix, Coal Miner, pp. 194-97.
93. N.P. Rhinehart, West Virginia, U.S.A. Annual Report of the Department of Mines 1936 (Charleston, W.Va.: Jarrett Printing Co., 1937), pp. 20-21.
94. "The Joy "15-CC" Portable Conveyor," Coal Mining Catalogs Including Directory of Manufactures and a "Where-to-buy-it-Nearby" Directory 1941 (New York: McGraw-Hill Publishing Company, Inc. 1941), p. 66.
95. Keystone Mining Catalog 1928, pp. 346-47.
96. This view is included in Coal Age 12 (1927): 427.
97. "The Mining Safety Device Co.," Keystone Mining Catalog 1928 (McGraw-Hill Catalog and Directory Company, Inc., 1928), pp. 416-18.
98. Ibid, pp. 489-95.
99. Fayette County Deed Book No. 67, p. 372. Part of the lease agreement between the Fordson Coal Company and the Maryland New River Coal Company was Maryland New River's assumption of Fordson's contracts, which included a contract between Fordson and Street-Amet Weighing and Recording Company dated 29 June 1923, for a "weighing attachment known as an Indicating and Recording Attachment." For additional information see "The Development of the Streeter-Amet Weighing Recorder," Modern Mining 5 (1927): 137; and "Streeter-Amet Weighing and Recording Co.," Keystone Coal Mining Catalog 1928, (New York: McGraw-Hill Catalog and Directory Co., Inc., 1928), p. 562.
100. Another possibility was the run-out track fed back into the main bench level track and the empties were brought back to the mine, not through the Headhouse but on the main track.
101. Jones, interview, 23 October 1980.
102. Wire rope is generally composed of 6 strands, with each strand composed of 19 individual wires wound together. The lay of a rope refers to the ropes twist, that is, left lay has a left hand twist, while regular or right lay has a right hand twist. In this case alternate regular and Lang lay means 3 strands have a right lay, while the other 3 strands have a left lay, and are wound together to form rope.

103. "Installation," Coal Age 18 (1927): 629-30.
104. Keystone Coal Mining Catalog 1928 (New York: McGraw-Hill Catalog and Directory Co., Inc., 1928), pp. 232-33.
105. David R. Mitchell, Coal Preparation (New York: The American Institute of Mining and Metallurgical Engineers, 1943), p. 168.
106. Nuttall, Trees, p. 80. For a view of the original Nuttall Tipple see Trees, no page number.
107. Mitchell, Coal Preparation, pp. 127-31.
108. "Nuttallburg Smokeless Fuel Company," The Coal Catalog Combined With Coal Field Directory for the Year 1922 (Pittsburgh: Keystone Consolidated Publishing Co., Inc., 1922), p. 1127. The Tipple view referred to was used to illustrate the above article as well several other Nuttallburg photographs.
109. "Efficient Surface Plant at North Diamond Mine," The Coal Industry 8 (1923): 361.
110. Mitchell, Coal Preparation, pp. 134-35.
111. "Preparation of Coal: The Factors Which Led to the Present Practice of Cleaning and Sizing Coal; Anthracite and Bituminous Preparation," The Mining Catalog 1923, p. 172.
112. Mitchell, Coal Preparation, pp. 712-16.
113. "Maryland New River Coal Company," 1952 Keystone Coal Buyers Manual (New York: McGraw-Hill Publishing Company, 1952), p. 416.
114. Ibid, p. 672.
115. "Kanawha Manufacturing Company," Coal Mining Catalogs Including Directory of Manufacturer and a "Where-To-Buy-It-Nearby" Directory 1941 (New York: McGraw-Hill Publishing Co., Inc., 1941), p. 135.
116. Mitchell, Coal Preparation, pp. 460-61.
117. For this view see William E. Cox, Life on the New River: A Pictorial History of the New River Gorge (Washington, D.C.: Eastern National Park and Monument Association, 1987), p. 12.
118. Charles Singer, et al, ed, The History of Technology, Vol IV: The Industrial Revolution c1750 to c1850 (London: Oxford University Press, 1958), pp. 89-91.
119. Nuttall, Trees, p. 68; and "Origins and Development of the Ventilating Fan," Coal Age 15 (1918): 690-91.

120. Paul, Nineteenth Annual Report, p. 205.
121. James W. Paul, Chief Mine Inspector, Twentieth Annual Report Coal Mines in the State of West Virginia, U.S.A. for the Year Ending June 30, 1902 (Charleston, W.Va.: The Tribune Printing Co., 1903), p. 232; James W. Paul, Chief Mine Inspector, Twenty-First Annual Report Coal Mines in the State of West Virginia, for the Year Ending June 30, 1903 (Charleston, W.Va.: The Tribune Printing Co., 1904), p. 236; and John Laing, Chief Department of Mines, West Virginia, U.S.A. Annual Report of the Department of Mines for the Year Ending June 30, 1909 (Charleston, W.Va.: News Mail Co., Printers, 1910), p. 473. There are some discrepancies about the powering and size of this fan. The 1908 report states the fan is electric while all the other reports state that it was steam powered, which is the conclusion the author has drawn. Some reports say the fan is 18 feet in diameter, others 16 feet. There is no clear indication as to its actual diameter.
122. Earl A. Henry, Chief Department of Mines, West Virginia, U.S.A. Annual Report of the Department of Mines for the Year Ending June 30, 1914 (Charleston, W.Va.: Tribune Printing Co., 1915), p. 228.
123. "Fan Speed Is Controlled From Inside of the Mine," Coal Age 10 (1927): 368-69. Included are several views of the Fan House and the operating equipment.
124. The Fan House as of the summer of 1991 was scheduled to be removed and the mine opening by the Office of Surface Mining, due to the deteriorated condition of the structure and the collapsed roof.
125. "Maryland New River Coal Co.-Dubree No. 4 Mine," 1952 Keystone Coal Buyers Manual (New York: McGraw-Hill Publishing Co., Inc., 1952), p. 672.
126. James W. Paul, Chief Mine Inspector, Nineteenth Annual Report on Coal Mines in the State of West Virginia, U.S.A. for the Year Ending June 30, 1901 (Charleston, W.Va.: The Tribune Co., Printers, 1901), p. 205; and The Coal Field Directory and Mining Catalogues of Coal Mining Equipment for the Year 1915 (Pittsburgh: Keystone Consolidated Publishing Co., Inc., 1915), p. 647.
127. "Substation Changed with No Loss of Time," Coal Age 4 (1926): 164.
128. John A. Garcia, "Laws That Prescribe Ventilation Vary Widely," Coal Age 16 (1926): 528-30.
129. "Installation," Coal Age, p. 630; and R.E. Powers, "Automatic Substations in Coal Mining," Modern Mining 5 (1927): 145-52.

130. "Screen Above Dry-Sand Bin Can Be Swung Clear," Coal Age 12 (1926): 471. This article also includes a view of the sand drying apparatus.
131. "Maryland New River Coal Co.-Dubree No. 4 Mine," 1943-44 Keystone Coal Buyers Manual including Directory of Mines (New York: McGraw-Hill Publishing Co., Inc., 1944), p. 286. This was the first year that dustless treatment was listed in the Keystone Catalog, and was offered by Maryland New River until they ceased operations in 1955.
132. A photograph of this structure is in the New River Gorge National River Headquarters Library, Glen Jean, West Virginia, Photograph Collection, under "Towns-Nuttallburg" which identifies this building as a general store below and a furniture store above.
133. Fox, Paul. Interview by Lee R. Maddex, 31 May 1991. Paul Fox is a lifetime resident of Edmund, West Virginia and a former miner.
134. Nuttall, Trees, p. 58.
135. Photograph is in the Photograph Collection at the New River Gorge National River Headquarters. NERI Negative No. 1639. This view is apparently from a Red Ribble panoramic view taken at Nuttallburg in the 1930s. Ribble is noted for taking panoramic views in the southern West Virginia coal fields.
136. This information is based on the 1922 Nuttallburg map and informal conversations the recording team had with local residents who came to the site during the summer of 1991 to fish and camp.
137. Paul, Nineteenth Annual Report, p. 205.
138. W.R. Chedsey, "Locomotive Haulage," The Mining Catalog (Coal Edition) for the Year 1923 (Pittsburgh: Keystone Consolidated Publishing Co., Inc., 1923), pp. 661-62.
139. The Coal Catalog Combined with Coal Field Directory (Pittsburgh: Keystone Consolidated Publishing Co., Inc., 1924), p. 986.
140. "Some Light Highway Suspension Bridges," The Engineering Record, 3 February 1900, p. 92; and Henry G. Tyrell, History of Bridge Engineering (Chicago: The G.B. Williams Co., Printers, 1911), p. 249.