The history of the slate industry in Buckingham County, Virginia

Laurie Pitts Jones

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Laurie Pitts Jones

THE HISTORY OF THE SLATE INDUSTRY IN BUCKINGHAM
COUNTY VIRGINIA

UNIVERSITY OF RICHMOND
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PREFACE

No one has ever written or published a history of the slate industry in Buckingham County, Virginia. Many geologists and newspaper correspondents have written, from time to time, short articles and technical descriptions of various phases of the Buckingham slate industry, but all of the related published material that I have had access to has been somewhat sketchy and inaccurate. Consequently, this essay is an attempt to fill, in a comprehensive manner, another of the numerous gaps in the economic and industrial history of Virginia.

It is impossible to overestimate the importance of industrial history in its relationship to Virginia's political and social trends. It is intended that this essay not only supplement our existing inadequate economic history of Virginia, but that it might someday serve as an aid to the scholar who will write a definitive history of industry in Virginia.

The inspiration for this essay must be credited to my grandfather, Arthur L. Pitts, who believed that the dignified beauty and permanence of Buckingham slate was not only distinctive but symbolic of Anglo-Saxon traditions.
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CHAPTER I

SLATE DEPOSITS IN THE UNITED STATES AND THE GEOLOGIC AND HISTORICAL BACKGROUND OF SLATE DEPOSITS IN BUCKINGHAM COUNTY VIRGINIA

Deposits of slate, a valuable and widely used building material, have been discovered in seventeen of our United States. Of these seventeen states only six, Maine, Maryland, New York, Delaware, Pennsylvania, and Virginia, possess extensive deposits of commercial value.

The slate region of Maine lies near the center of the state. The south eastern Maine deposit is about ten miles long and one in the southern part of Piscataquis County. This belt of slaty rock is fifteen to twenty miles wide and thirty or more miles long, lying in York and Knox counties. The deposit is thin. The portion of the belt yielding commercial slate is confined to a small area around the towns of Monson, Blanchard and Brownsville.

In Maryland, slate deposits occur in Harford, Montgomery, and Frederick Counties. The main deposit is a projection of the Pennsylvania slate belt into Harford County around the town of Cardiff. The slate belt in Montgomery and Frederick Counties is approximately twelve miles long and one and one-half miles wide. This belt is

2. Ibid., pp. 74-83.
southeast of Sugar Loaf Mountain between Hyattstown and Mt. Ephraim.

New York Slate deposits are a continuation of the Vermont deposits and are located principally in Washington County.

The richest slate deposits in the United States occur in Pennsylvania. These Pennsylvania deposits, aside from those of Lancaster County and a part of York County, occur chiefly in Northampton and Lehigh Counties in a belt two to four miles wide and approximately thirty-two miles long. The centers of the slate industry along this belt are the towns of Bangor and Slatington.

The Peach Bottom Slate deposit is about ten miles long and ranges from one-quarter mile to one-half mile wide. The deposit lies partly in York and Lancaster Counties, Pennsylvania and Harford County, Maryland.

6. According to Dale and Bleekman, "Peach Bottom Slate", probably the most widely known trade name in the slate industry today, derived its name from that of a small village slightly west of the Susquehanna River, formerly an important freight stop on the now disused canal. This village is located in the triangular township which forms the southeast corner of York County, Pennsylvania.
Vermont has four distinct slate districts. One district extends along the Connecticut River for more than two-thirds the length of the state. The next district is in the center of the state near Northfield and represents a belt of clay-slate which is ninety miles long by one to seven miles wide. The most important Vermont district extends for twenty-six miles between Taconic Range on the west and Lake Champlain on the east. The fourth district occupies an area from two to three square miles near the town of Benson in Rutland County.

In Virginia there are four principal slate areas, which, listed in order of their importance are: The Buckingham-Fluvanna area, including the Albemarle belt; The Amherst County belt; the Fauquier-Culpeper area; and the Quantico belt lying in Spottsylvania, Stafford and Prince William Counties.

The Virginia slate deposits fall into two distinct classes according to the geologic age in which they were formed. The slate belts in Amherst, Fauquier-Culpeper and Albemarle Counties, formed in the earliest division of the Paleozoic era, constitute the first class and are designated as cambrian deposits. Slate deposits in

8. Thomas Nelson Dale, Slate in the United States, pp. 120-146.
9. Ibid., pp. 146-164.
Buckingham-Fluvanna Counties, and Spottsylvania, Stafford and Prince William Counties constitute the second group. These slate beds, formed in the period following the Cambrian and next below the Silurian, are designated as Ordovician deposits.

Of the slate deposits in Virginia, that of the Buckingham district, which forms a part of the Buckingham-Fluvanna Counties area is the most valuable, commercially. Slate suitable for roofing purposes has been quarried in Albemarle, Amherst, Buckingham and Fauquier Counties but to no appreciable extent in any except Buckingham.

This excellent roofing slate deposit in Buckingham-Fluvanna Counties is largely exposed, in 1948, in the neighborhood of Arvonia, Buckingham County. Arvonia is situated on Hunts Creek, a tributary of Slate River, three miles southwest of the point where the Slate River empties into the James River. This main slate formation covers an area of eight to ten square miles with approximately one and one-half square miles lying north of the James in Fluvanna County. The geographical center of this formation is approximately fifty-three miles west-northwest of Richmond and sixty miles

10. See Map page 6.
LEGEND

A. Arvonia belt (Buckingham and Fluvanna counties)
B. Quantico belt (Prince, William, Stafford, and Spotsylvania counties)
C. Warrenton belt (Fauquier and Culpeper counties)
D. Esmont belt (Albemarle County)
E. Snowden belt (Amherst and Bedford Counties)

After Watson & Powell
northeast of Lynchburg.

North of the James River the formation extends for approximately one and one-half miles into Fluvanna County. The Fluvanna or north end of the formation is located almost entirely on the Upper Bremo Estate, formerly owned by General John Hartwell Cooke. The eastern boundary of this north end of the deposit is a point one-half mile west of the town of Bremo. The western boundary, Strathmore Creek, is one and three-fifths miles from the point marking the eastern boundary. This creek flows in a southwesterly direction through the Bremo Estate and enters the James River at a point one and two-fifths miles southeast of Shore's Railroad Station.

South of the James the formation strikes about south-southwest extending to one mile south of Penlan or five and one-quarter miles from the south bank of the James. The eastern boundary, south of the James, lies approximately one thousand yards west of the John Cooke Memorial Bridge. Its western boundary extends to the Virginis Mill's site on Slate River.

Stephen Taber, a noted Virginis geologist, estimated the depth of the Buckingham slate formation at more than one thousand feet.

He qualified his statement, however, by adding that complicated folding and faulting made an accurate estimate of the depth impossible.

Geologists have proven conclusively, by the discovery of crinoids, brachiopods, trilobites and other related fossils that the Buckingham slate beds were formed during the Ordovician Age and made their appearance along with the first North American land masses.

One unusually well-preserved crinoid was discovered in Buckingham quarry in 1912 by Mr. Thomas E. Williams and others. The crinoid cup, thus compressed, was three inches high and two and one-half inches wide at the top. The specimen, now in the National Museum, covered an area of slate slab fourteen by eighteen inches. The imprint of seventeen tentacles with their thickly massed pinnules was clearly discernable.

To understand properly the origin and age of this Buckingham slate deposit it is necessary to study carefully the powerful geologic forces that shaped it into its present day form.

The natural history of this slate bed fell into two separate and distinct periods; each period of necessity covered thousands or even millions of years. The first period had to do with the slow process of erosion and disintegration of rocks into mineral particles. These mineral particles slowly turned into clay and the clay in turn was deposited in beds on the ocean floor. Such deposits of clay were the raw materials from which the limitless forces of nature fashioned the slate beds of today.

The second period covered many more thousands of years during which unseen natural forces converted these clay deposits into shale through compression. As the earth's surface continued to cool and shrink numerous folds and wrinkles were formed just as the skin of an apple wrinkles when it is baked. The shale beds were caught in these folds and wrinkles and subjected to intense metamorphism. These mountain-building forces, at work in the earth's crust as it contracted, squeezed the shales with terrific pressure under high temperatures. Intense pressure changed the orientation of the minute mineral particles normally lying parallel to the deposit and caused them to assume parallelism at a considerable angle to the direction of pressure. When this parallelism resulted

20. A shale is a laminated rock of clay composition, but it does not possess the cleavage or splitting properties of slate.
in slaty cleavage, or the tendency to split easily, true slate was formed. There was also, under high temperature and pressure, an alteration of the mineral constituents. Mica, quartz and chlorite were the predominating new minerals formed.

The mineralogical constituents of Buckingham slates in order of their relative abundance are: muscovite and sericite, quartz, biotite, carbonate, graphite, pyrite, chlorite, magnetite, with accessory plagioclase, zircon, hematite, tourmaline and rutile. The chemical compounds of which these minerals were constituted, the amounts of sea life present and the size of sedimentary particles when these beds were deposited, account for the distinctive color and texture of Buckingham slate.

Some time after the slate was formed the beds were subjected to further tensions, shears and contractions which resulted in systems of joints and faults, slip cleavages, shear zones and irregular orifices in which veins of quartz and calcite were formed. These natural destructive forces rendered much of the Buckingham slate useless for roofing purposes.

The cleavage and bedding of all the Buckingham slates are,


(11)
for the most part, identical, striking N. 33° to 27° E., and
dipping 70° to 90° southeast with an average of approximately 85°
to 86°. The slate is dark gray in color with a slight greenish hue;
has a smooth lustrous surface and is of minutely granular crystalline
structure. According to geological study, it is slightly magnetic,
does not effervesce in cold dilute hydrochloric acid and is
very sonorous.

Tests by Rogers, Merriman and Dale have classified Buckingham
slates among the very best in the entire world. They have a
strength of 8,000 to 11,720 pounds per square inch, a toughness of
deflection on supports twenty-two inches apart of 0.280 to 0.366
inches. No other slate in the world can surpass these last two qualities.
The most remarkable of all the properties of these slates is
their unfading quality. Buckingham slates have stood exposed for
more than a century and still have their original color and lustre.

Even the best informed geologists hesitate to place a definite
numerical age on the Buckingham slate deposit. Certainly the

25. Strike: direction at right angles to the inclination of a
plane of bedding, cleavage, jointing, etc.
26. Dip: inclination of the cleavage plane of the bed.
27. Thomas L. Watson, Mineral Production in Virginia During Year
30. Ibid., p. 150.
millions of years that this deposit stood undiscovered and unmolested
owershadow and make insignificant the comparatively few years that
have elapsed since its discovery by pioneers advancing into the
Piedmont.

The movement into the interior of Virginia naturally followed
the rivers and by 1724, when George I of England granted James
Shelton of King William County four hundred acres bounding an un-
named river in upper Henrico County, the advance had reached be-
yond the juncture of the Rivanna and James Rivers up the Fluvanna
River into what is today Buckingham County. By early 1826, when
an additional grant of 1,600 acres of adjoining land was made to
James Shelton, the Buckingham slate deposit had been discovered and
the unnamed river of 1724 was now called Slate River.

Grants, during this period, which later became important be-
cause of their location within the Buckingham-Fluvanna Counties
slate belt were made, in 1725, to Benjamin Cooke and Richard Cooke,

31. Virginia State Land Patents (Henrico County), Book 11, p. 348.
32. Andrew A. Lipscomb, editor, The Writings of Thomas Jefferson,
(Washington D.C., 1903), Vol II, p. 5. Jefferson states that
the James River from its juncture with the Rivanna River to
the Blue Ridge Mountains was called the Fluvanna River.
34. Ibid., Book 12, p. 236.
and in 1728, to John Nicholas of Seven Islands.

Although this slate deposit was not discovered for one hundred and eighteen years after the founding of the Jamestown Colony, it is reasonable to assume that the earliest settlers were well acquainted with the properties and uses of slate as roofing material. A Welsh poet, in 1570, mentioned the Penrhyn quarries; and in 1602, Carew described the physical characteristics of the slates of Cornwall. Prior to these literary references, slate had been used to cover old castles at Carnarvon and Conway in North Wales.

The earliest known use of slate was for the construction of a chapel roof at Bradford-on-Avon, England, in the eighth century. The first mention of the use of slate in Virginia was not made until the movement inland from Jamestown was well underway. In 1662, the Colonial Assembly authorized the construction of thirty-two houses at James City and specified that they be constructed of brick and covered with slate. A similar act, in 1705, authorized the directors appointed for building a house for the Governor of Virginia Magazine of History and Biography, Vol. XXXIII, p. 44.
37. Ibid.
38. Ibid.
the Colony and Dominion, to send to England for iron work, stone slate, glass, lead, and other materials.

In 1787 slate or tile roofing was specified for the large tobacco warehouses being constructed in Petersburg and Alexandria. Since no slate deposits were open in Virginia at that time, slate was still being imported from England and Wales.

There are a number of reasons why Virginians had not developed the rich Buckingham slate deposits. In Virginia, in the eighteenth century, there was a great scarcity of capital and labor, both skilled and unskilled. Especially was there a limited supply of skilled stoneworkers and craftsmen who would be essential to the quarrying industry. This was a result, no doubt, of English emigrants coming to America from the farming and laboring classes. The economic opportunity offered by farming and independent land holding was much greater than that offered by quarrying. Poor transportation, the necessity of securing a plain living and the British administrative policy of discouraging any industry that might lessen England's trade, made the development of slate deposits, prior to the Revolution, impossible.

40. Ibid., p. 286.
41. Ibid., Vol. XII, pp. 581-582; Vol. XIII, p. 43.
Jefferson's Notes on Virginia indicated an interest in the slate beds east of the Blue Ridge Mountains; and when the opportunity came for the development of these deposits, the deposit along Slate River in Buckingham County was the first opened.

44. Oliver Bowles, Op. Cit., p. 20. (The date given by Bowles in this note should read 1795 instead of 1787.)
CHAPTER II

VIRGINIA INITIATIVE PRIOR TO 1865

William B. Rogers, in his geological reports to the legislature of Virginia during the years 1833 to 1841, gave a lengthy description of the valuable slate deposits situated east of the Blue Ridge Mountains in the northern part of Buckingham County. Roger's references may well be repeated here.

This roofing slate makes its appearance on both sides of the James River, dipping east at an angle of about eighty degrees with the horizon. In Buckingham, the bed is largely exposed in the neighborhood of New Canton on Slate River and the quarry at present wrought by the enterprising owner, Mr. Sims, yields a material which will bear comparison with the better qualities of the imported roofing slate. In texture, density and capacity of resisting atmospheric agents, it can scarcely be excelled by a similar material in any part of the world.*** There are many other places in the neighborhood from which slate of the same kind may be procured, and several small quarries have been opened. Increased facility and cheapness in transporting this valuable article to Richmond and the seaboard, will, no doubt, at some early day, bring it into extensive use in our principal towns in that direction, and will render the quarrying and preparation of it a profitable business. 46

This slate deposit was first opened in the year 1796 to obtain slate for re-roofing the state capitol building in Richmond. The lead sheets of the original roof had torn loose from their joints

46. Ibid.
47. Ibid.
allowing moisture to enter and damage the roof sills and rafters. Wyatt Coleman, caretaker at the capitol, called the Governor's attention to the defective condition of the roof in July 1794. In August 1794 Dabney Minor, chief carpenter in charge of buildings at the capitol, inspected the roof at the request of Governor Brooke and advised that immediate action be taken to correct the faulty condition.

The General Assembly, meeting in December 1795, passed a bill granting the Directors of Public Buildings a sum not exceeding five thousand dollars for the purpose of repairing or altering the roof of the capitol.

Daniel Hylton, William Foushee and Robert Mitchell, Directors of Public Buildings, decided that the existing roof covering could not be satisfactorily repaired and ordered that the lead sheets be replaced by slate. On March 30, 1796, the Directors entered into contract with Andrew Hosea, Adam Baird and James Carney to cover the capitol with one hundred and fifty squares of slate at fifteen dollars per square. It was further stipulated that the contract be

49. Dabney Minor to Governor, August 7, 1794, MS. Executive Communications.
51. Square = enough slate to cover one hundred square feet allowing a three inch overlap.
fulfilled by October 25, 1796. Baird, Carney and Hosea all had
worked at the capitol prior to the time of this contract but Baird
is probably the only one of the three with a knowledge of the

Buckingham slate deposit. For reasons of which we have no definite
record, the process of manufacturing, transporting and placing the
slate on the capitol was extremely slow and in August 1797 the
Directors of Public Buildings recommended that the unfinished job
be abandoned. The partly finished slate covering was removed and
by December 12, 1797, the capitol roof was completely covered with
fireproofed wood shingles.

The state auditor ruled that Baird, Carney and Hosea had not
fulfilled their contract, and refused to issue warrants for more
than the £342 10s 8d already paid. On the other hand, Baird,
Carney and Hosea maintained that the contract could not be fulfilled
through no fault of theirs and demanded payment for the remainder
of the contracted sum. Payment was still refused and, in 1806, Baird
and Hosea, (Carney was now dead), authorized their attorney,

52. Entry, General Account A, March 30, 1796, MSS. Virginia State
54. Daniel Hylton, William Foushee and Robert Mitchell to Governor,
August 31, 1797, MS. Executive Communications.
55. William Foushee to Governor, December 12, 1797, MS. Executive
Communications.
56. Not added to Entry. October 1797, General Account A, MSS. Public
Building Papers.
John Nicholas of Albemarle, to bring suit against the Commonwealth.
The suit proceedings took place at a district court held at the
capitol in Richmond, April 8, 1806. Part of the decision is quoted
as follows:

Upon an appeal from a decision of the auditor of Public Accounts
refusing to issue to the appellants a warrant for money due them from
the Commonwealth for services by them as performed in covering the
capitol with slate, this day came as well as the appellants by
their attorney, as the Attorney General of the Commonwealth, and
thereupon a witness being sworn and examined and sundry papers pro-
duced in evidence, seen and inspected, and the appellants and Attor-
ney General fully heard. It is the opinion of the court that the
appellants are entitled, from the Commonwealth to $322 7s 4d ***
It is considered by the court that the auditor of public accounts
do issue the appellants a warrant or warrants in the treasury for
the same. 58.

If covering the state capitol with slate had been successful
it is reasonable to believe that the Buckingham deposit would have
become widely known at a very early date. However, Rogers, in his
geological reports, states that after the first project was aban-
doned little further use of this deposit was made until 1833 when
Edward W. Sims undertook extensive development of the same quarry
from which slate for the capitol was obtained. This quarry was
located in the center of the field near the present day Williams

57. Copy of Power of Attorney, Andrew Hosea and Adam Baird to
  John Nicholas, January 5, 1806, MS. Public Building Papers.
58. Copy of Court Decision, Adam Baird and Andrew Hosea Va. Common-
    wealth, April 8, 1806, MS. Public Building Papers.
quarries.

Mr. White Hughes, one of the oldest inhabitants living in the Buckingham slate area, in 1948, states that a Mr. David Bullock operated a slate quarry in the area in 1812. An article published in the Richmond Times-Dispatch, February 2, 1913, substantiated the fact that a quarry existed at that time by stating that old Trenton Mill in Cumberland County was covered with slate in 1812 or 1813.

Dr. Asbury Christian in his book, Richmond Her Past and Present, refers to a David Bullock as one of the building directors appointed in 1812 for directing the erection of the Governor's Mansion in Richmond. The fact that this David Bullock was connected with public buildings leads us to assume that he was the same David Bullock operating the Buckingham quarry.

In 1834 Edward Sims, with the aid of few hands and very crude arrangements, prepared for market six hundred squares of slate at twelve dollars per square. Rogers described the Sims quarry as follows: "The bed of slate wrought by Mr. Sims has an average breadth of sixty yards. The rock splits with great regularity, presenting a smooth surface and having such strength and flexibility as to admit of being separated by iron wedges into sheets of one

60. Richmond Times-Dispatch, February 2, 1913.
hundred square feet and not more than an inch in thickness."

The main reason for operating the Sims quarry at this time was to furnish slate for the buildings at the University of Virginia. When the original tin roofing material proved unsatisfactory, John Hartwell Cocke, a friend of Jefferson and an expert in every phase of building, advised that the covering for the university be restricted to slate.

By late summer, 1835, Edward Sims, under contract to General Cocke, had transported to the university enough slate to cover the roofs of numerous dormitories. The cost of wagon transportation from Buckingham to Charlottesville was prohibitive, consequently, Sims was obliged to send his slate down the James to Columbia and up the Rivanna to Milton by batteau.

The slating project at the university was completed in June, 1838, and the report of the Rector and Board of Visitors indicated that Sims was paid almost $5,000 for slate furnished in that year. Over a three year period Sims received more than $10,000 for slate supplied the university.

63. Ibid.
65. Ibid., p. 383.
66. Ibid.
Although we have no account of how many hands were employed by Mr. Sims, old Buckingham records for 1839 indicate that some slaves were hired. It is also probable that some of General Cooke's slaves were used at the quarry while slate was being produced for the University.

In 1846 Sims tried his hand at manufacturing school slates, but the rough slate texture and a lack of abrasive equipment caused him to abandon the project.

In 1851 Sims sent samples of roofing slate and a slate slab to the Governor of Virginia to forward as a Virginia contribution to the World's Fair to be held in London. These samples were of such high quality and appearance that they won first award in London in 1857.

Mr. Sims was an enterprising man and did not confine his talents to quarrying; he was also widely known as a mill owner and bridge builder.

Several attempts were made by corporations to open quarries in the Buckingham area during the general period 1837 to 1860. However, none of these companies achieved the success enjoyed by the Sims private quarry.

70. Virginia Historical Register, Vol. IV, p. 176.
72. Petition to the Speaker of the House of Delegates from Edward W. Sims and Others, January 22, 1841, Virginia State Library Archives, Petitions from Buckingham County.
In 1837 the Virginia General Assembly passed a bill authorizing Abraham W. Cohen of Richmond to form the Buckingham Slate Mining Company. Capital stock was to be not less than $100,000 nor more than $500,000; shares would sell for $100.00 each. This corporation was to be chartered for thirty years and its holdings in land were not to exceed 100,000 acres. The corporation was probably never fully organized since no record of its activity can be found.

An act to incorporate the Virginia Slate Company consisting of Thomas B. Durrack, Theodore F. Crawford, John Hemphill, Charles S. Dupont and their associates was passed by the General Assembly and enrolled March 15, 1858. The company was to be confined to the counties of Buckingham and Albemarle with a territorial limitation of 2000 acres. Capital stock shares were not to exceed 2,500, each valued at $100.00.

Another act passed by the same legislature, March 29, 1858, incorporated the Virginia Mills Slate Mining and Manufacturing Company. This company was owned and operated by John S. Nicholas, Robert C. Nicholas, and George W. Nicholas all of Buckingham. Their charter allowed for land holdings up to 1500 acres and a maximum capital stock value of $150,000. Each share was to sell for $50.00.

74. Ibid., 1857-58, p. 187.
75. Ibid., p. 229.
The outbreak of the Civil War did not completely stop activity by these companies. The Sims Quarry, The Virginia Slate Company and The Virginia Mills Slate Mining and Manufacturing Company were still in existence in 1861. There is an indication that activity in the slate industry in Buckingham did not entirely cease until 1863 or after. The Old Richmond Theatre, rebuilt in Richmond during the war and completed in 1863, was covered with Buckingham slate which was undoubtedly supplied after the outbreak of hostilities in 1861. There is no record of any quarrying activity in Buckingham for the years 1864 or 1865.

77. Richmond Times-Dispatch, February 2, 1913.
CHAPTER III

OUTSIDERS CAPTURE THE SLATE INDUSTRY DURING THE ERA OF POLITICAL RECONSTRUCTION

Buckingham County remained comparatively free of devastation during the Civil War. The main Union and Confederate armies marched through the county on their way to Appomattox in 1865, but it escaped the blackened chimneys and ash heaps so characteristic of the Shenandoah Valley and the areas around Richmond and Fredericksburg, Virginia, in general lay prostrate when Lee surrendered in 1865; her large industries were destroyed or damaged, commerce was at a standstill and surplus capital for investment did not exist. Yet, immediately after the surrender, and under almost prohibitive conditions, the seemingly lifeless body of the state began to stir with new vigor. The reasonable "Presidential Plan" of reconstruction for the South gave Virginians new hope and assurance. Throughout the state there was a return to industry, especially natural industry such as mining and quarrying.

The decade after the war, under the "Presidential Plan" and the "Radical Republican Plan" of reconstruction, witnessed renewed interest in the Buckingham slate deposit. Two of the three companies operating prior to 1863, the Virginia Slate Company and the Virginia Mills Slate Mining and Manufacturing Company, recommenced quarrying.

operations in 1866. Two new companies, the Buckingham Slate Company and the Old Dominion Slate Company commenced operations in 1867 and 1869 respectively.

In February, 1866, the Virginia Slate Company's charter was amended to allow the corporation to borrow capital not exceeding $50,000. No record exists on the Virginia Slate Company after 1866, and we have no way of ascertaining why or when its activity was halted. The harsh measures exercised by the Radical Reconstruction Government as well as the inability to obtain loans might have caused the company to discontinue operation.

The Virginia Mills Slate Mining and Manufacturing Company, known after the war as the Nicholas Quarry, started back to quarrying in 1866, and continued operating until 1882 when their slate holdings were sold to the Big Quarry Slate Company.

A new company, the Buckingham Slate Company operated by John E. Mulford, Albert Ordway, Phineas Davis and associates was incorporated in January 1867. The company was to operate with a minimum capital stock of $100,000 and a maximum of $1,000,000. Land holdings were to be limited to 5000 acres in Buckingham.

The one acre in Henrico County was undoubtedly for storage or office space.

The company was composed entirely of Virginians. John Mulford and Albert Ordway were Richmonders and Ordway had served as a Colonel in the Confederate Army. The third main partner in this company, Phineas A. Davis, was a small land owner in Buckingham County and had sold the company its original land holdings of thirty-four acres for $1,900. Davis, in all probability, was granted his share in the company as partial payment for his land.

The Buckingham Slate Company went into active operation in 1867 and was producing finished roofing slate by 1868, when slate valued at $1,332.20 was shipped to the College of William and Mary to cover the existing unsatisfactory roof of the Wren Building.

The company increased its real estate in 1870, when adjoining slate land was purchased from William C. Humphrey.

Written references to the Buckingham slate quarries during the 1870's indicate that the Buckingham Slate Company's quarry was usually called the Ordway Quarry. This company operated with limited success during the 1870's and by 1882 had ceased to exist. The Old Dominion Slate Mining Company, owned and operated by Philip A. Dugan, George Hart, William Conelly, James C. Davidson, Samuel B. Spafford and James Hill, was the first company owned by out-of-state interests to enter the Buckingham slate industry. All the stockholders were from the city and county of New York, and according to Philip A. Dugan, Jr., formed a very close corporation. The company purchased slate land near the southern boundary of the Nicholas quarry property line in 1868 and 1869 from Elizabeth and William Pierce and Samuel Williams respectively. The company was located on what was later discovered to be an excellent slate vein, and with proper management would, undoubtedly, have become one of the most successful of all the quarries operating in the area. However, the members of the corporation expressed a definite lack of interest in slate quarrying and the company ceased operating in a few years. Oddly enough, when operations were halted, the

87. Philip A. Dugan, Jr. to Arthur L. Pitts, September
The arrival of the next outsiders, a small group of Welsh immigrants, marked the beginning of a new era in the Buckingham slate industry. Two brothers, Evan R. Williams and John R. Williams, were the first of these Welshmen to arrive in Buckingham. In 1871, the same year of their arrival, they purchased a small tract of land along Hunt's Creek near the present day site of Arvonia from William Price and his wife.

The Williams brothers carried on limited quarrying activity until 1882 when they acquired the valuable Nicholas Quarry Tract. John R. Williams, a friendly and personable man, had come to Richmond in the late 1870's to solicit aid for their quarry. In 1882, as a result of Mr. Williams efforts, the Big quarry Slate Company, composed mostly of Richmonders, was incorporated. Members of the company were John R. Blackburn, John W. Fisher, William G. Crenshaw, A.Y. Stokes, Robert T. Hubard and John R. Williams. Robert T. Hubard was the only Buckingham native included in the corporation.

The company's charter provided for a minimum capital stock of $20,000 and a maximum of $500,000. It was also specified that the

89. Pitta Papers, Philip A. Dugan, Jr. to A.L. Pitts, September 6, 1909.
90. County Records, Deed Book II, p. 16.
91. County Records, Deed Book IV, pp. 280, 281.
company's offices be located in Richmond, Virginia.

In 1882 the Williams brothers, with the financial backing of the Big Quarry Company members, purchased the Old Nicholas Quarry Tract from Orilla Alice Nicholas, Hampden B. Nicholas and Mrs. M.N. Barziza for thirty thousand dollars, twenty thousand in cash. This tract was a part of the original charter grant made by George II to John Nicholas in 1728, and consisted of two hundred and fifty acres situated on both sides of Hunts Creek in the middle of the roofing slate vein. The Nicholas tract was probably the most valuable of all the slate lands in the Buckingham area.

Within six years after the purchase of the Nicholas slate holdings the Williams brothers and the Big Quarry Company had acquired almost two hundred and fifty more acres of surrounding land, and firmly established their claim to a large portion of the productive slate vein. The acquisition of this additional slate land involved three separate purchases. The first of these purchases was made in 1884 when William H. Bumpass and Susan Bumpass of Hot Springs, Arkansas sold John R. Williams and the Big Quarry Company 179 acres north of Hunts Creek along the western boundary of the Nicholas tract for $1,666.66.

93. Ibid.
94. County Records, Deed Book IV, pp. 280-281.
95. Ibid.
96. County Records, Deed Book V, p. 509.
in 1886 John R. Williams and Evan R. Williams, acting independently
of the Big Quarry Company, purchased the Perrow's Big Quarry prop-
er ty from L.B. LeSueur, Henrietta F. LeSueur, William J. Osolin and
Virginia A. Osolin for two thousand dollars. Perrow's Big Quarry,
located near the present day site of the Arvonia railroad depot,
had begun operations in the late 1850's as a private concern, but
suspended operations in 1881 because of a boundary dispute with the
Nicholas Company. Perrow's quarry was first developed by O.R.
Perrow and at the time quarrying was suspended it was being operated
by John M. Norvell and others of Bremo Bluff, Virginia. The
ownership of this property had passed to the Perrow heirs by the
time of its sale in 1886.

The third purchase of adjoining property was made in 1886 when
a few acres south of Hunts Creek was obtained from John W. and
Martha A. Abrahams of Baltimore, Maryland.

The Williams brothers and their successor, the Williams Slate
Company, acquired much more land after these first purchases, but
the company's quarrying activity has always been restricted to the
area included in the first three purchases.

At the same time the Williams brothers and the Big Quarry

97. County Records, Deed Book V, p. 509.
Company were expanding their slate holdings, the Edwards and
Roberts quarry, located one mile southeast of the Nicholas quarry,
was being developed on a large scale. This quarry was owned
by John W. Edwards and Edward Evan Roberts and was located along
an excellent slate vein. John C. Senger obtained a lease to this
quarry in 1890 and in 1899 sold his lease rights to Arthur L. Pitts.
The quantity and quality of slate produced from this fine quarry
made it figure prominently in the boom decade, 1900 to 1910.

In 1883 three Welshmen, David J. Morgan, O.F. Thomas and A.J.
Pierce, formed a company and opened a quarry on land leased from
Elizabeth S. Pierce for twenty years. Their contract called for
a royalty of twenty-five cents per square for all roofing slate
produced and one cent per square for all flagging sold, to be
paid to her annually throughout the twenty years. The quarry,
known locally as the "Welsh Quarry", was located very near the pre-
sent day site of Arvon Presbyterian Church which is approximately
five hundred yards east of the Old Nicholas quarry.

The Columbia Slate Quarry Company, owned by William A.
LeSueur, James A. Lyons, L.B. LeSueur, Jr. and David J. Morgan, be-
gan developing a quarry very near the Welsh Quarry in 1889. The
operation of the Columbia Company soon proved unsuccessful and the

101. County Records, Deed Book X, p. 278.
102. Ibid., Deed Book, VI, p. 250.
103. Ibid., Charter Book, p. 74.
It is evident that successful slate quarrying companies in the Buckingham field in these early years were the exception and not the rule. At the beginning of the twentieth century the Williams brothers were operating the only large scale slate business in Buckingham. There are a number of reasons why the Williams brothers' company was successful while the other quarries in the field either failed or became discouraged. The first and greatest reason for their success was the excellent quality of the slate vein uncovered in their quarries. No company, even with the best management, could make a profit from poor quality slate veins.

Another important reason for the success of the Williams slate company was the personality, sterling character and business acumen of John R. Williams. John R. Williams was a man of many talents and one who did not lack an art of persuasion. It was mainly through his efforts that the Big Quarry Company was formed and that the Williams quarries were always well financed. Mr. Williams was not long in breaking through Richmond's aristocratic shell; and by the time of his death, in 1901, he was among the best known citizens of the city. He not only made numerous friends but he advanced rapidly in the business and commercial world. He was widely known as president of the Southern Trust Company and later as a director of the State Planters Bank. John R. Williams made Richmonders, as well as others, conscious of slate, and his management of the slate sales

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offices in Richmond was another large factor in the success of the Williams quarries.

Another principal reason for the success of the Williams quarries, and the Buckingham field in general, was that the quarry owners of this early period, being of Welsh origin themselves, attracted many of the best Welsh slate makers to this country. These people were not only gifted slate makers and quarrymen, but they possessed exceptional dramatic and musical talent. They were, for the most part, people of excellent character and background. Their limited financial means necessarily forced them to live thrifty and modest lives, but their devotion to the community and to the church made them excellent citizens and a worthwhile contribution to American society.

One of the most noted and best informed of all the Welsh slate manufacturers was Robert O. Jeffrey, quarry pit manager for the Williams Slate Company. Mr. Jeffrey was typical of a great majority of the Welsh immigrants to Buckingham. His obituary is quoted as follows:

Robert O. Jeffrey, one of the oldest, as well as one of the best-known and most highly appreciated citizens of Arvonia, died at his

104. Information on John R. Williams was supplied by his daughter, Mrs. James T. Sloan of Richmond, Virginia.
home here yesterday morning at 9 o'clock, after an illness of less than three months. His decline dated from the death of Mrs. Jeffrey, his life companion, who died here on February 7th. Up to that time he had lived a robust life, being physically strong and with little if any illness. Everything possible was done for him. He was taken to Richmond and later a specialist was summoned here, but nothing seemed to avail. He passed away quietly of a complication of disorders, being willing to go and with no murmuring.

Robert O. Jeffrey was born in Llanrug, Carnarvonshire, North Wales, on January 16, 1842. He came to this country in 1863, remaining for some months in Slateston, Pa., and later going to Vermont, returning here in 1865, the year of Lee's surrender. Leaving here that same year, he traveled extensively, even as far west as California, returning to New York and marrying there Miss Jane Williams, sister of the late John R. and Evan R. Williams, who afterwards made such a success of the slate business here. He had known this family in Wales, where they had been reared as near neighbors. In 1876, the year of his marriage, he came to Buckingham and settled at Arvonia, becoming quarry pit manager for the Williams Slate Company, a position which he filled with eminent satisfaction until a short while before his death. He was reckoned the best informed slate quarryman in the entire Buckingham slate field.

Three half-brothers and a half-sister survive the deceased in Wales. They are John Jeffrey Roberts and Owen Roberts, Llanrug; Evan O. Roberts, of Pochwen and Mrs. John O. Williams, of Cym-y-Glo. He also leaves a full sister, Mrs. Jane Markham in Coytesville, N.J. A near relative is the powerful Welsh preacher. Rev. John W. Morris of Poultney, Vermont.

He also leaves two sons, Owen and Stanley Jeffrey, prominent young business men of Arvonia. They were with him during his last illness and were at his bedside when he died.

Mr. Jeffrey was a member of the Arvonia Presbyterian church, a devout and sincere Christian, a man who held the respect, esteem and admiration of every one with whom he was acquainted. His inner life was flawless, a beautiful exemplification of what Christianity can do with the heart. He was the very soul of honesty and sterling integrity, truthful in every word and detail of life, scrupulously clean of speech and gentle of manner. In his last illness he was patient and submissive, never impatient, but quietly and trustingly awaiting his end. At the last meal which he ate with his family he expressed a strong faith in Christianity and reaffirmed his trust in God.

He was buried in the Arvonia cemetery by the side of his late wife, who had preceded him to the grave less than three months ago. Several beautiful Welsh hymns were sung at the grave. The Odd Fellows had charge of the services at the grave, the services in
the church being conducted by Rev. Plummer F. Jones. His grave was literally covered with flowers, sweet reminders of his clean and fragrant life—a life which will be remembered by coming generations as an incense and a blessing. 106.

Many of the first Welsh immigrants came to Buckingham directly from the Marionethshire slate fields in North Wales and from the noted quarries in Carnarvonshire owned by Lord Penrhyn. 107

Many quarry owners realized too late the absolute necessity of employing these skilled men for estimating, judging and splitting the better grades of slate.

The Welsh people first named the area around the slate fields where they settled "Arvon" as taken from Carnarvonshire. This name was late changed to Arvonia because of a similarity to two other Virginia towns, Afton and Avon. This change was made as a matter of convenience to prevent possible mistakes in postal delivery.

During the period of Welsh development of the Buckingham slate deposits, commercial markets for finished roofing slate were expanded to the states west of Virginia. In 1880 an article in the industrial and mining journal, The Virginias, stated that the quality of Buckingham slate would always give it a high position in the markets of the country. The article further stated that at

106. Richmond Times Dispatch, April 28, 1912.
107. Richmond News Leader, "Slate Workers Go on Strike", June 2, 1914
108. The name Arvon spelled out with red slate can be seen on the roof of Arvonia Depot in 1948.

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that time there was a good slate trade between Buckingham and Nashville, Tennessee. Slate shipped to Tennessee from Buckingham was taken in wagons or carts across the James River ferry to Bremo Bluff and from there was floated to Lynchburg on the James River and Kanawha Canal. From Lynchburg the slate was distributed to the west by rail.

In 1882 three hundred fifty-six tons of slate were shipped from Buckingham to Huntington, West Virginia by way of the Richmond and Allegheny Railroad which had replaced the carrier service of the canal.

Not only was there an increasing market for Buckingham slate as adequate methods of transportation were developed, but geological interest was also focused on the area after John Iyle Campbell, geologist from Washington and Lee University, made a study of the slate deposits in 1881. In 1882 numerous samples of Buckingham slate were forwarded to the National Museum from the Williams quarry and the Edwards and Roberts quarry.

The Williams brothers attracted architectural and technical interests to the area in 1884 when they erected a large mill for manufacturing structural material from slate for floors, shelves, table tops, blackboards and smaller articles. Some years later

the mill building and much of the machinery was destroyed by a wind storm and never rebuilt.

The Williams quarries also shipped roofing slate abroad during the 1880's, some being sent directly to Wales. However, Buckingham slate was first exported in 1876 when a shipment left Richmond for England.

Markets were growing, and there was a national and international interest in the Buckingham slate industry in 1884 when John R. Williams, Evan R. Williams, John J. Roberts and John W. Edwards were awarded a contract to complete the proposed Buckingham Railroad Company road to the slate quarries. The contractors did all masonry, grading, built all trestles, and furnished all crossties for the road. In the summer of 1885 the road was completed as far as the slate quarries. The Richmond and Alleghany Railroad Company leased the road for forty years from January 1, 1885. After this mill line was constructed, transportation difficulties were solved and rapid development of new markets took place.

Richmond Times-Dispatch, December 3, 1934.
Richmond Times-Dispatch, "Fifty Years Ago", August 22, 1926.
Any slate company operating in the Buckingham fields in 1948 could be selected as a typical area organization. Never has any company in the area, whether successful or unsuccessful, deviated more than slightly from the accepted and customary practices of the field in general. The companies that have failed and the companies that have survived can together be classified as typical. All the companies that have succeeded have operated quarries along good slate veins, and a very large percentage of the companies that have failed owned poor quarries along the deposit. Thus it is easy to see that the reasons for success have always been essentially the same, and the reasons for failure the same.

The establishment of the Arthur L. Pitts Slate Company marked the beginning of a return to the Buckingham slate industry by Virginians. The Pitts Company experienced both success and failure during its existence; it operated on various levels of production and was active during thirty of the most important years in the history of the Buckingham slate industry. For these reasons the organization and operating procedure of the A.L. Pitts Company has been selected as a typical example.

Arthur Letcher Pitts of Scottsville, Virginia, railroad contractor and canal boat owner, had noticed the volume of roofing
slate shipments from Buckingham by way of the James River and Kanawha Canal and its successor, the Richmond and Alleghany Railroad, and became extremely interested in the commercial possibilities of slate quarrying. In 1890 he came to the Arvonie slate fields to purchase land for prospecting purposes, and in that same year obtained a few acres from a trustee of the L.B. Hughes estate. Notable among the slate lands which Mr. Pitts purchased prior to 1898 were three small tracts owned by James Patterson, Samuel Williams, and John J. Lloyd. Mr. Pitts obtained these tracts, a total area of sixty-four and one-fourth acres, for $358.38, or less than six dollars per acre. The A.L. Pitts Slate Company acquired much more land during the years 1898 to 1929, but the Fontaine Field Tract, acquired in 1901 from Mary E. Fontaine, William Scruggs and others, was the only large tract of valuable slate land the company ever owned.

The Pitts Company did not begin large scale quarrying operations until 1899 when it purchased the lease rights to the John W. Edwards and Edward Evan Roberts slate properties from John C. Senger. John Senger had operated the Edwards and Roberts quarry, to little advantage, and for one hundred dollars transferred his lease to Arthur L. Pitts. This lease called for a royalty of

116. Ibid., Deed Book VIII, pp. 235, 511; Deed Book IX, p. 483.
117. Ibid., Deed Book X, pp. 495, 597, 599.

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twenty cents per square to be paid on all roofing slate manufactured from the quarries on the Edwards and Roberts property and was to remain in effect until March 1, 1907.

A.L. Pitts, assisted financially by his brother, John L. Pitts, hired fifty or more men and began immediate development of the excellent slate vein in the Edwards and Roberts quarry. Efficient and honest business methods were always applied, and by December 1901 the company was receiving numerous orders from Birmingham, Alabama, Columbus, Ohio, New Orleans, Louisiana, New York City, Anniston, Alabama, Charlotte, North Carolina, Knoxville, Tennessee, and many other cities outside the state. A good market had already been established within the state, and the A.L. Pitts Slate Company Sales Office, located at 12 North Ninth Street in Richmond, was soliciting orders from all over the South.

The demand for slate from the Pitts Company continued to increase, and within a few years A.L. Pitts had accumulated enough capital to erect a new home and a large company commissary in Arvonia. His new home, containing twelve or more rooms, was modern in every respect, and is, in 1948, one of the finest residences in the area.

118. Ibid., Deed Book X, p. 278.
119. Pitts Papers, File of Orders for 1901.
120. Ibid., William H. Campbell to A.L. Pitts, January 4, 1902.
121. Ibid., Journal, Building Accounts, January 1, 1905.
The lease to the Edwards and Roberts properties was to expire in 1907, and A.L. Pitts, not wishing to have to increase royalty payments or take a chance of losing his lease rights to a higher bidder, sold his lease contract to the Virginia Slate Company in 1908 for approximately eight thousand dollars.

In 1907 A.L. Pitts, conscious of his earlier successes, began to develop a new quarry on his Fontaine Field property. Exceptional skill and adequate financial backing have always been necessary for the development of new quarries, and many of the beginners in the slate business in this period often lacked both essentials. However, prospective quarry owners had attempted to open so many quarries in the area, that by 1907 a more or less standard procedure was established for opening new quarries. It is generally known that in the Buckingham slate fields there has been very little change, since 1907, either in the methods of starting quarries or in the processes involved in manufacturing finished slate; so in describing the development of the A.L. Pitts Fontaine Field quarry, the slate manufacturing procedure used in 1948 can be applied with few modifications.

The first step taken in planning the Fontaine Field quarry was to determine, as nearly as possible, the exact location of the slate vein. After careful evaluation of core drill samples

122. Ibid., Journal, Fly leaf list of accounts receivable, July 1, 1907.
the probable extent of the vein was marked off. Inspection of the vein through small hand-dug holes served to double check the core drill results. When the vein was thus definitely located and staked off, the next step was to remove all top soil and inferior rock from the main slate bed. Laborers removed this soil and rock with horse or mule-drawn drag pans and with steel carriage pans lowered from steam-driven, overhead cables. The suspension of these overhead cables, their proper location, horizontal anchorage and angular support presented a major engineering problem and required much labor to erect. Overhead cable hoisting systems were very expensive, but absolutely essential for moving stones from the quarry pit, especially after the pit reached a depth of twenty or more feet.

In a few months the labor force had removed all surplus earth from the main slate vein, and the process of manufacturing roofing slate was ready to begin. A force of twenty or more skilled slate-makers joined the unskilled labor force and by January 1908, forty-three men, skilled and unskilled, were working daily at the new quarry. Workmen first opened the exposed slate bed by drilling and blasting a V-shaped groove the entire length of the quarry floor.

123. Ibid., New Quarry Journal, p. 2 lists prices of carriages at $200.00 each, cables at $150.00 each and pans at $40.00 each.
124. Ibid., Time Book, 1908.
This groove was from three to six feet deep and ran parallel to the slate cleavage. After clearing this channel, the workmen used drills, bars and small charges of black powder to free large masses of the slate rock. They in turn subdivided these large masses of slate into slabs small enough to be hoisted to the surface.

Notches cut in the larger masses marked a line parallel with the slaty cleavage and workmen split the rocks by driving heavy wedges into each groove. To further subdivide these large masses of slate pit hands drilled vertical holes in line with the grain direction and across the grain and made straight fractures with plugs and feathers.

The overhead cableways could hoist stones weighing five tons or more and could be adjusted so as to dump slate in the air on the waste heap or lower the stones to the blockyards.

The engines that hoisted slate from the quarry pit were located some distance from the quarry, and safety and efficiency in hoisting depended on signals transmitted from the quarry's edge to the engine operators. The signalmen seated in a small shanty overhanging the brink of the quarry conveyed the quarry pit foreman's signals to the engine house by electric buzzer. Various numbers of buzzes indicated a desire for such action as hoisting.

125. "Feathers" are metal expanders with one rounded surface to fit the drill hole and the other surface ground flat to fit a wedge or "plug".
taking up block or holding steady. The signalman controlled the movement of each slate block until it reached the edge of the quarry and he ordered the engine operators to return all poorly balanced or loosely chained blocks to the quarry floor.

Small hand pushed carts conveyed the good slate blocks from the cable hooks to the blockyard and splitting shanties. The most experienced and skilled of all the quarrymen, the blockmakers, took charge of the large pieces of slate and subdivided them into blocks fourteen to twenty-four inches wide. A thorough knowledge of the properties of slate as well as sound judgement was essential in properly breaking and splitting blocks. The blockmaker examined the rock carefully and placed chalk marks along the surface to indicate the exact points where holes should be drilled. When the drill operator had completed the required boring other workmen placed wedges or plugs in the drill holes and hammered them evenly until a strain was placed along a line on the block. The blockmaker then delivered a sharp blow at a particular point on the rock and a perfectly straight break resulted. In some instances, when thin slabs were available, workmen chiseled a groove on one side of the block and then turned it over and struck the opposite side suddenly with a wooden mallet or 'beetle' until the fracture was made.

Next, splitters took charge of the completed blocks and easily
divided them along the cleavage into slabs the thickness of eight slates. Other splitters then split these thinner slabs, always subdividing them in the center until eight slates were obtained. The average thickness of a single slate was about three-sixteenths of an inch, but thicker slates were supplied when specified.

The trimmers then placed these rough slates on a trimming machine to remove uneven edges. The aim of the trimmer was to obtain the largest rectangle possible of a given standard size. Trimming was done with heavy cleaver-like blades attached to overhead spring poles. These trimming machines were usually operated by foot treadles, although some quarries used steam powered pulley drives to run the trimming blades.

Yard workmen loaded finished slates on wagons or carts and transported them to the slate yards where they were punched and stored in vertical tiers. These vertical tiers were never stacked over three slates high.

At first Mr. Pitts believed his new quarry would produce an

The A.L. Pitts Slate Company price lists give standard sizes as follows:

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<td>20 x 11</td>
<td>20 x 12</td>
<td>11 x 7</td>
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excellent grade of slate, for many years to come, but as the quarry pit grew deeper the slate vein became narrow and faulty. The Fontaine Field quarry never did prove profitable and quarrying there was suspended in 1914.

In 1909 Arthur L. Pitts became interested in the slate lands formerly owned by the Old Dominion Slate Company and carried on a lengthy correspondence with heirs of the original owners. None of the relatives of the original company members could produce a title or proof of title to the land and the matter had to be given up. Many new companies had attempted to enter the slate industry during this period and good slate land was very expensive and almost impossible to obtain.

There was not only a shortage of good slate land in 1909, but there was also a shortage of local quarry labor. A.L. Pitts, unable to obtain enough local labor for quarry work, contracted with the Machold Employment Agency of Philadelphia to supply him as many competent laborers as possible. Mr. Pitts offered to pay each laborer one dollar and fifty cents per day as a beginning wage, plus his train fare from Philadelphia to Arvonia. In February 1910, after much delay and correspondence, the Machold Agency finally managed to ship nine men, Elka Chasock, Samuel

126. Ibid., Philip A. Dugan to A.L. Pitts, February 25, 1910.
Colmar, Carol Tworkofsky, William Mattioly, Andy Hatcho, Anton Schmidt, John Clain, Peter Ginass and Jan Kasines. All of these men were foreigners, and four of the nine could not write their names. In less than one month after their arrival in Arvonia, six of the men had left the area, and a short while thereafter the other three left. This was the last attempt ever made by any of the quarry operators to bring outside labor into the slate fields.

In June 1910, shortly after the last three foreign laborers left the slate fields, the local slate makers union called a general strike of all skilled workers. The A.L. Pitts Slate Company and the Williams Slate Company took the lead in opposing any kind of settlement with the union, and maintained that it was their duty to deal directly with the men and not a representative of the union. No settlement could be arranged until five months later when the slate makers union gave in to the quarry owners.

The Pitts Company suffered heavily during this strike. Many large orders from its best customers had to be returned unfilled.

129. Ibid., Copy of Contract between Kaehold Agency and A.L. Pitts, February 9, 1910.
133. Pitts Papers, Orders for 1910.
Much good will was lost between the company and its employees; there was heavy depreciation of idle equipment and the commissary was operated at a heavy loss.

Shortly after the strike was settled A.L. Pitts and John L. Pitts bought the Virginia Slate Company properties at public auction for $27,600, and for a second time obtained a lease to the Edwards and Roberts quarry. There were bidders at the sale from Danville, Lynchburg, Scottsville and Richmond, but the bidding was monopolized by the Pitts brothers and R.S. Tuck of the Richmond Slate Company. The Virginia Slate Company owed A.L. Pitts approximately $4,000 when it went into the hands of the receiver, so in buying the Virginia Slate Company's property the A.L. Pitts Company could afford to bid more than other interested parties.

This purchase included all equipment at the Edwards and Roberts quarry; the quarrying plant there was in excellent condition and the Pitts Company lost no time in bringing the quarry's production back to full scale.

The great number of quarries in the Arvonia area in 1910, and just prior to 1910, served to push competition to a very dangerous point. Companies failed, some were forced out of business and

134. Ibid., Journal, Trial Balance for 1910, p. 140.
137. Ibid., Journal, 1911, p. 142.
at times, the relationships between others become strained. A.L. Pitts managed to steer clear of disagreements with other quarry operators, but in 1910 he became involved in a suit concerning a property boundary line with Mr. F.E. Roberts, Jennie S. Jones, and others. In March 1909 Mr. Pitts, in a letter to F.E. Roberts stated his intention of giving the Buckingham Slate Company a lease on a strip of land adjoining the Roberts Dutch Gap property and added that the lease would be granted according to a mutually agreed upon survey map. The lease was given to the Buckingham Slate Company, and after work was underway Mr. Roberts and the other owners of the Dutch Gap property maintained that the Buckingham Slate Company was operating on their property. Roberts, Jones et al. filed suit, and in December 1910 a special term of the Buckingham court was called to try the case. The case was decided in favor of Mr. Pitts, and a new survey was ordered by the court. The south end of a quarry which Roberts was working at that time was discovered to be on property which the court awarded to Mr. Pitts. The Buckingham Slate Company immediately obtained a lease on the Pitts half of the quarry; they paid a royalty of twenty-five cents per square co all roofing slate produced from this quarry and continued to work there until 1914.

139. Richmond Times-Dispatch, December 2, 1910.
140. Pitts Papers, New Quarry Journal, p. 130.
In 1911 the Pitts Slate Company was again producing slate from the Edwards and Roberts quarry. This quarry had been operated with excellent results by the Pitts Company from 1899 to 1906. In 1907, when the company drew up a final balance sheet for its first seven years of quarry operation, the books showed a net profit of $27,194.14. This figure excluded salary paid to A.L. Pitts, commissary profits, and an outstanding debt of $4,000 still receivable from the Virginia Slate Company.

The operation of the new quarry from 1907 to 1914 was never profitable, and it was not until the Edwards and Roberts lease was obtained that the company bookkeeper could again use black ink.

A balance sheet, drawn up on January 1, 1912, listed a profit of $9,618.08 for the year 1911. The main operating expenses as listed for that year are as follows: furniture and fixtures, $232.50; lease of quarry, $236.20; supplies, $2,174.14; pay roll, $26,174.66; general expenses, $1,772.81; team expense, $1,898.66; interest and discount, $468.50; royalty, $2,344.70; freight and express, $1,756.52; bad debts $160.75; advertising, $100.75; fuel, $1,061.04. Total operating expenses for the year amounted to $38,354.23, and the total value of slate produced and sold was $48,073.87.

142. Ibid., Journal, p. 142.

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In 1912 a profit of $5,327.34 was realized on a payroll of $16,522.98.

Slate sales fell off noticeably during 1913 and by the end of the year the company could realize a profit of only $509.31. The payroll for 1913 totaled $15,348.86.

In 1914 the payroll dropped to $13,796.23 and the books showed a loss of $159.08.

The payroll increased to $15,622.57 in 1915 and profits jumped to $4,050.26. A carefully itemized inventory taken in 1915 valued the company's slate and supplies at $30,111.62.

Profits in 1916 remained almost the same but the quarry payroll jumped to $20,084.66.

By 1916 slate sales had increased considerably over the 1913 and 1914 slumps. It seemed that the initial war scare was wearing off and business was going ahead as usual. However, after 1917, the war situation became much more serious and slate sales practically halted. None of the quarries operated full scale again until after 1921. A.L. Pitts, assisted by his good friend Senator Thomas S. Martin, attempted to obtain Navy contracts for slate.

143. Ibid., p. 154.
144. Ibid., p. 212.
145. Ibid., p. 252.
146. Ibid., p. 286.
147. Ibid., p. 284.

(53)
during the war, but the temporary nature of most buildings being constructed at that time excluded the possibility of large contracts for slate.

From January 1, 1917 to December 1, 1921, the total payroll for the Pitts Company was only $7,189.67. For the same period the company sustained a loss of $7,677.57. In 1921 the good slate vein in the old quarry, or Edwards and Roberts quarry, was exhausted. The quarry was also too deep to operate profitably.

In 1921 A.L. Pitts began developing another quarry on the Fontaine Field property. A small development crew worked there from 1921 to 1924 and never produced more than a few squares of slate.

By September 12, 1924, the company's total loss since 1917 had climbed to $13,386.25. The company stopped all quarry operation after 1924, and limited its activity to small scale new developments. In 1929 the Pitts Company halted all activity and the final balance sheet set the total loss during the previous twelve years at $13,278.09.

Although Arthur L. Pitts was almost seventy years old in

148. Ibid., Acting Chief of Naval Bureau of Yards and Docks to Senator Thomas S. Martin, June 19, 1917. (This letter is an original and was probably forwarded to A.L. Pitts by Senator Martin.)
150. Ibid., p. 407.
151. Ibid., pp. 420-431.
152. Ibid., p. 432.
153. Ibid., p. 444.

(54)
1929, he steadfastly maintained that with proper financial support he could still develop a profitable quarry on his Fontaine Field property. The depression years undoubtedly prevented him from securing the necessary financial aid to carry out further quarry development.
CHAPTER V
THE BOOM DECADE 1900 TO 1910

The years 1900 to 1910 witnessed intensified interest and activity in the Buckingham slate industry. A noticeable increase in the quality of rail transportation, the availability of surplus capital and the extension of markets for slate to the South were contributing factors in the sudden mushrooming development which took place in this so-called "Boom Decade".

The stockholders of the Chesapeake and Ohio Railway Company, at their October 19, 1897 meeting, authorized the conveyance by the Buckingham Railroad Company of its road and franchises to the Chesapeake and Ohio Company. The exchange of deeds and securities was duly executed and ratified by the Board of Directors November 10, 1897. The merger of the Buckingham Railroad with the large and growing Chesapeake and Ohio road assured the Buckingham slate quarry operators of first rate rail transportation to any point to the United States. The uncertain financial standing of the Buckingham Railroad was no longer a problem, and efficient transportation was now guaranteed.

The increase of spending in the South during the period of great monopolies, and the liberal Republican administration of Theodore

154. Decatur Axtell, Typed notes on the Buckingham Branch Railroad. n.p.
Roosevelt also served to create interest in the Buckingham slate industry. Capital for investment, so noticeably absent during the early 1890's, was again making its appearance, and numerous operators, backed by money from Virginia, Indiana, New York, and Maryland, undertook slate manufacturing on a large scale.

The recent and sudden success of the A.L. Pitts Slate Company was another reason for this widespread interest in the slate fields. Mr. Pitts had personally traveled through the South a number of times to build up slate agencies and specify slate for the finest buildings being erected at that time. The growing southern market was another important reason for the development of the slate industry after 1900.

At the beginning of the twentieth century only two slate companies were operating in the Arvonia slate fields, the A.L. Pitts Company and the Williams brothers company. By 1907 eight slate companies were either manufacturing slate or developing new quarries in the area.

The first new company to begin work in the area after 1900 was the Buckingham Slate Company Incorporated of Richmond, Virginia. The company was chartered November 22, 1904 and was authorized to issue capital stock not to exceed $25,000. Company officials were appointed as follows: James W. Gordon, president, Frank W. Brown,
treasurer, Howard Gordon, secretary and W.H. Wooton, general manager. All of the officers except W.H. Wooton were from Richmond.

The Buckingham Slate Company Incorporated, a new company, was in no way connected with the Buckingham Slate Company chartered in 1867. This company originally operated an old quarry first developed by D.W. Morgan and others. In 1910 the company obtained a lease from A.L. Pitts on the south half of the Dutch Gap quarry formerly owned by E.E. Roberts, Jennie S. Jones and others. The Buckingham Slate Company was never able to obtain good slate land or leases and ceased operations in 1914. However, the company existed until 1929 when the State Corporation Commission revoked its charter for default of charter privilege payments.

On December 8, 1904 the Lesueur Slate Company, operated by William A. Lesueur and financed by Albert McMahon of Newport News, Virginia obtained a charter from the State Corporation Commission. This quarry was operated on land in the center of the active slate field leased from John Wesley Abrahams, Juliet Abrahams and Romeo Abrahams, all of Baltimore, Maryland. The lease was to hold for fifteen years with a royalty of fifteen cents per square for all roofing slate produced during the first seven and one-half years.

and a royalty of twenty cents per square the second seven and one-half years.

Two days after the LeSueur Slate Company obtained its charter the Pelham Slate Company Incorporated, owned and operated by W.R. Root and R.C. Root of Virginia, H.P. Root and J.R. Root of Arkansas, and Albert Root of Indiana, was chartered with provision for a maximum capital stock of $100,000. Land holdings were not to exceed 5,000 acres.

William R. Root and Ralph C. Root took personal interest in the development of the extreme southern end of the Buckingham vein near the Welsh named village of Pelham and opened an extensive quarry there. Slate was first removed from the open pit, and later removed from tunnels extending on either side of the main quarry opening. The company, while primarily interested in the manufacture of roofing slate, also constructed a large mill to manufacture structural slate. The Pelham Company found itself unable to operate on the original maximum capital stock of $100,000 and in 1908 increased the maximum to $250,000.

158. County Records, Deed Book 12, p. 231.
159. Ibid., Charter Book, p. 73.

(59)
In January 1905 the Arvonia Slate Company Incorporated, owned by R.B. Handy, W.P. Winfree and others of Lynchburg, Virginia, began quarry operations about five hundred yards northeast of the LeSueur Slate Company quarry. The Arvonia Company was operated on a small scale with a maximum capital stock of $10,000.

The Richmond Slate Company Incorporated was the next company to enter the Buckingham Field. John W. Pierce and Edward F. Roberts became interested in developing a quarry near the present day site of Ore Bank, but lacking the necessary capital to carry on the operations, they decided to personally go to New York or some northern city to solicit financial aid. However, they met Mr. R.S. Tuck, a Richmond insurance broker, quite by accident while waiting to board a train for the North. Mr. Tuck became interested in their proposition and called in a few of his friends to discuss the matter. They decided to back Roberts and Pierce and on September 14, 1905 the Richmond Slate Company was chartered with a maximum capital stock of $25,000. The company, headed by C.R. Guy, president, F.P. Loth, vice-president, and R.S. Tuck, secretary and treasurer, was a success from the beginning. They advertised their slate as the "Queen Anne" brand and classified it as the best roofing slate on

162. Unclassified Charters, June 16, 1905.
163. Information supplied by Flummer F. Jones, New Canton, Virginia.
164. Unclassified Charters, September 14, 1905.
In 1924 the Richmond Slate Company sold its holdings to the Le Sueur Slate Company; the Le Sueur Company manufactures first class slate from this same quarry in 1948.

In April 1906, the Virginia Slate Company purchased a lease to the Edwards and Roberts quarry from the A.L. Pitts Slate Company and began operation under a charter limiting maximum capital stock to $150,000. The company was headed by W.P. Venable, president, Walter Scott, secretary and treasurer, and Thomas H. Garden, vice-president. Thomas H. Garden of Prospect, Virginia managed the company's affairs, and was very active in carrying out company improvements in the Arvonia area. The Virginia Slate Company did too much improving, however, and by 1909 its holdings were in the hands of a receiver, Samuel T. Martin of Scottsville. Samuel Martin, brother to Senator S. Martin, managed the company's affairs very wisely until its holdings were sold in 1910.

A sales company, the Williams Slate Roofing Company Incorporated of Richmond, with Evan R. Williams as president and W.R. Wood, secretary, was chartered in February 1907.

Quarries operated by the eight active companies in 1907 varied

165. Letterhead, Richmond Slate Company Incorporated, 1908.
166. Unclassified Charters, April 24, 1906.
168. Unclassified Charters, 1907.
greatly in size and depth, but the larger quarries measured from two to four hundred feet in breadth and from fifty to three hundred feet in depth. Slate production for the years 1900 to 1910 was increased more than 50 per cent over production for the years 1890 to 1900.

With such a sudden increase in the slate industry, Arvonia found its facilities entirely inadequate to handle the abnormal influx of people and interests. A group of leading citizens headed by Plummer F. Jones, Arthur L. Pitts and R.S. Warren obtained a charter for the Arvonia Improvement Company in December 1906. Immediately a hotel and several other buildings were erected, and civic layout plans were drawn for the expanding town.

The hotel, constructed by the Arvonia Improvement Company, was an eighteen room frame building complete with an acetylene gas lighting system and running water. The hotel and a large stable were rented to a manager for $50.00 per month. The hotel was to accommodate regular boarders as well as the traveling public.

The Arvonia Improvement Company was not the only company to add improvements to Arvonia during this period. The Virginia Slate Company erected a large two story combination store and

office building beside the hotel, and furnished it throughout in a
strictly modern fashion. The company also erected numerous small
dwellings for their quarry hands on a tract about one mile east of
the center of Arvonia.

Arthur L. Pitts added to the growing town in this boom era by
building a large commissary, warehouse, two stables, and several
small dwelling houses for his workmen. Mr. Pitts also opened
Arvonia's first drug store in 1907. Mr. R.C. Richardson operated
the store and served as pharmacist for over thirty years.

In this period of increased investment and expansion the commu-
ity felt a definite need for banking facilities. In 1906 a char-
acter was obtained for the State Bank of Arvonia. The charter named
W.P. Venable, president of the bank and R.S. Warren, cashier. The
issue of capital stock was not to exceed $25,000.

In 1907 E.E. Crooke, an exceptionally able and personable man,
came to the Arvonia slate fields to serve as a promotional agent.
Crooke had traveled widely and, according to his own admission,
could sell worthless real estate with ease. Crooke's clients were
usually wealthy Northerners who knew practically nothing about the
value of Southern real estate. Crooke bought a small section of land
in the slate area in 1908 for less than two thousand dollars and in

173. Pitts Papers, Store Journal, 1907 to 1941.
174. Unclassified Charters, April 12, 1906.
the same year sold it to the Ferncliff Slate Company of Rochester, New York for a sum reported to be upward of $20,000.

The Ferncliff Slate Company, chartered under the laws of Maine and represented in Virginia by A.L. Pitts, Jr., began developing the Ferncliff slate properties in 1909. The first slate produced from the quarry was of excellent quality but it was soon discovered that the vein was extremely shallow and worthless.

Another small company bought land from Crooke and in 1909 opened the Arvon Slate Quarry on land adjoining the Penlan Slate Company property near Penlan. The Arvon Slate Company operated on an extremely poor slate vein for almost four years. In 1913 the company let its workers go elsewhere and ceased all operations.

Increased investment in the slate area during the years 1900 to 1910 skyrocketed real estate values, and made it impossible for local private firms to undertake manufacturing slate even on a small scale. The price of land in the slate area increased four fold in less than five years.

In 1910 possibilities in the Buckingham slate field seemed

unlimited; good slate veins had been located by most of the quarry operators; sales were up; labor was cheap; and profits were high. However, on June 1, 1910, a general strike of skilled workers paralyzed the entire Buckingham slate field from Ferncliff to Penlen.
On June 1, 1910, following the failure of the local American Federation of Labor Slate-makers Union and the quarry owners to reach a wage agreement, a general strike was called and every skilled workman in the Buckingham slate fields walked off the job. The members of the local union stated in an open letter to all the slate operators that they would not return to work until an agreement was signed by both the union and the operators. Operators stubbornly refused to recognize the union, and even the more conservative citizens in the area predicted that the strike would last for many months.

The strike situation did not develop suddenly, nor was it altogether a surprise to the people of the area. The question of difference between the slate makers union and the operators had been a live one for six weeks or more prior to the strike date. Numerous meetings were held on both sides and several times committees from each body met to discuss differences, but nothing definite could be agreed upon. At the time of the strike the union slate makers were working under a three year agreement with the operators.

This first agreement was readily and willingly signed by both the union representatives and operators in June 1907. Common laborers, mostly negroes, did not belong to the union, and continued to work daily despite the strike. There was always sufficient work, such as moving top, excavating and freeing the quarries of water, to keep the labor forces busy. Laborers could not remove or prepare slate in anticipation of the strike's end because in a few hours blocks taken directly from the quarry pit would lose their natural moisture or quarry water and were thereafter impossible to split.

Hundreds of skilled workmen were left idle by the strike, and Arvonia was apparently a dead town. Arvonia's entire business life depended on the slate industry. Many of the skilled workmen, some of them Welsh, left Arvonia within a few days to seek employment in the quarries of Maryland, Pennsylvania, New York, Vermont and Maine. The strike and the later exodus of skilled workers tended to demoralize all business in the area. Railroad traffic fell off noticeably, merchants stood idle behind their counters and the hotel's traveling trade disappeared almost entirely. The slate fields definitely felt the effects of the strike.

181. Ibid., "Reach Agreement in Slate Fields", November 26, 1910.
Labor conditions at the quarries were not good at the time of the strike. The poor wages and working conditions of this period could in part be attributed to unusually stiff competition between companies, but the fact remained, poor working conditions did exist.

Workers in the Buckingham slate fields in 1910 were of three general types; local skilled workers who had learned how to manufacture slate from Welsh immigrants, skilled Welsh immigrants and local laborers. Local laborers were mostly Negroes and they usually comprised nearly 40 per cent of a quarry's working force.

These skilled men sought only a wage increase when they refused to work in 1910, but they were up against operators who were entirely independent and who knew that almost all of their quarry hands were bound to them economically. Quarry hands usually lived in company houses, bought all their food, clothing and other needs from the company commissary, paid their doctor bills through company cooperatives, and were never able to save enough money to tide them over layoffs. Many workers remained in debt to the company for which they worked throughout the entire year.

While some companies managed at times to realize a net profit of 25 per cent or more over expenditures, exclusive of commissary

185. Ibid.
profits, there is no reason to believe that the slate workers were as notably exploited as some of the other workers throughout the country. Workers were allowed to accumulate debts with the companies without the payment of interest, and many of them were allowed to draw full pay in spite of heavy obligations. 187

In comparison with our forty hour week or one hundred and sixty hour month of today, the work week and work months of 1910 were long indeed. However, all quarries were exposed to the weather and could not be operated during snow, rain or extremes in temperature; consequently, some winter month averages ran as low as ninety hours. Summer averages exceeded three hundred hours at times. The average monthly working time throughout the year was one hundred and eighty hours.

Wages offered quarry workers were usually the same or very nearly the same at all quarries. Each quarry employed foremen on a salary basis. In 1910 the A.L. Pitts Slate Company employed two salaried men, and from 1910 to 1923 both men drew monthly salaries of $83.33 and $50.00 respectively, with no increases. Other quarry workers were paid a maximum of twenty-five cents per hour and a minimum of four cents per hour. The average was approximately

187. Pitts Papers, Store Records, 1910. Used as typical example.
188. Ibid., Time Book, 1907-1924, Used as typical example.
eighteen cents per hour.

The worker had no way of ascertaining before hand just how many hours he might work each week or month. Either accidents, sickness or bad weather could cut his working time indefinite amounts. He could, however, figure his annual earnings through averages. With an average working time of one hundred and eighty hours per month and an average wage of eighteen cents per hour he could figure his yearly earnings to be approximately $398.80.

Despite low wages, quarry work was not easy. Men had to be strong physically to handle heavy stones and operate crude machines for ten or twelve hours each day.

In early 1910 two young colored men were instantly killed within the space of one week in the Buckingham slate quarries. One was killed when a loose stone fell and struck him on the skull, and the other when a cable broke and threw him head first into the quarry pit. These two accidents, occurring close together, would indicate apparently that numerous accidents occurred at the slate quarries, but such was far from the case. The dangerous character of the work forced operators and men alike to exercise such extreme caution that a physician in the area stated that fewer accidents occurred per capita in the Buckingham slate field than upon the

189. Ibid.

(70)
numerous forms of the surrounding country. In spite of records of very few accidents and the exercising of extreme precaution, no one would deny that quarry work was, and still is, extremely dangerous.

Workmen in the slate field not only faced the economic problems of wages and the physical problem of accidents, but, also, the social problem of securing adequate recreation in the community. During the week there was no time for pleasure and only on Saturday afternoon and Sunday did the average worker have any spare time. No facilities for healthful exercise or any kind of cultural entertainment existed. The main events of interest, of necessity, were limited to the Saturday afternoon baseball games and the Saturday night knife and fist fights in front of the neighborhood saloon.

The latter form of recreation reached such serious proportions that, in 1908, the General Assembly of Virginia was forced to pass an act limiting the sale of whiskey, cider and other alcoholic beverages in or around Arvonia.

The strike dragged on, and in August 1910 the general opinion was that the strike would last until the following spring or summer. At this time business was still at a low ebb, railroad activity was

191. Ibid.
slack and little or no work was being done around the quarries.

By fall, there was widespread interest in the idle condition of the slate quarries. In October Senator Thomas S. Martin tried to intervene and bring about a settlement between quarry management and labor. The following is a portion quoted from his letter to A.L. Pitts:

Dear Arthur: I have been hearing through friends of mine a good deal about differences between the workmen and the owners of the quarries in the slate-making business in Buckingham. I have not had any of the particulars and do not know what the real trouble is ***. My political life brings me into some association with workingmen of the country who have generally been my warm supporters. I have felt that I would like to hear exactly what the trouble is, and would be very glad to give any service in my power in bringing about better conditions. 195

A.L. Pitts, in his reply to Senator Martin, stated that the operators would deal with the workers individually but had no intention of recognizing the union.

Senator Martin was not the first important official to become interested in the labor situation in the Buckingham slate field. Governor William Hodges Mann, in a letter to A.L. Pitts and other quarry operators two weeks before the strike was called, came more directly to the point when he wrote:

195. Pitts Papers, Thomas S. Martin to A.L. Pitts, October 31, 1910.
196. Ibid., A.L. Pitts to Thomas S. Martin, November 16, 1910.

(72)
It is important not only that laboring men be fairly treated, but that they shall think so, in order for the best results to be obtained, and, therefore, it is in the interest of the employers to adopt that method of settling with their employees which the employees desire. *** To the end that there may be that good feeling and mutual confidence which will bring employers and employees together as factors in the development and progress of our manufacturing and transportation interests. I respectfully and earnestly ask that you will give this matter careful consideration, and trust you may be able to see your way clear to comply with the request I have ventured to make in this letter. 197.

On November 21, 1910, the slate makers strike finally came to an end, and all agreements between the union and the operators were signed. The men agreed to return to work on practically the terms that existed prior to the June strike.

As soon as the strike was settled, business in all lines increased and there was again an optimistic outlook.

Credit for the settlement of the strike was given mostly to Mr. E.E. Crooke, who had been interested in the development of large scale slate manufacturing from the Buckingham deposit. Credit was also given Mr. F.C. Devison of Richmond for his part in settling the strike as a representative of the American Federation of Labor.

197. Ibid., Governor William Hodges Mann to A.L. Pitts, May 16, 1910.
199. Ibid.
200. Ibid.
CHAPTER VII

RECOVERY CONSOLIDATION AND DEPRESSION 1910 TO 1948

It has been pointed out earlier in this book that the strike was settled in November 1910, but interest and activity in the Buckingham field never again approached the boom stage of the previous decade. Promotional activity from 1910 to 1948 was static compared with the years 1900 to 1910. The sudden shutdown, at a critical moment when competition was high and Virginia slate was in demand, served as a blight that the industry has never outgrown.

During the strike, surplus stocks of slate of commercial sizes were quickly exhausted and the quarry operators, unable to fulfill contractual obligations or supply local demands, were forced to allow some of their best customers to turn to the Pennsylvania and Maryland quarries for slate and other roofing supplies. Most of the Buckingham operators absolved themselves from contractual liability and possible heavy financial losses by inserting within each contract clauses of nonresponsibility in case of strikes, accidents or circumstances beyond their control. The immediate monetary loss was small but the loss of good will and its consequent effect on future orders was a much larger item.

The slate industry recovered very slowly. By 1913 production

201. Pitts Papers, Columbus Slate Company to A.L. Pitts, August 3, 1910.
202. Ibid., A.L. Pitts to Columbus Slate Company, August 5, 1910.

(74)
production of roofing slate was back to normal, but outside interest and investment never regained its former level.

It has been pointed out that prior to 1910 most of the quarry operators tended to remain entirely independent of other operators in the area. However, the strike and the serious labor and market conditions which resulted, necessitated collective action. In 1911 operators of the Richmond Slate Company, the Arthur L. Pitts Slate Company, the LeSuer Slate Company, the Williams Slate Company, the Buckingham Slate Company and the Penlan Slate Company began holding organized periodic meetings to discuss current quarrying problems and practices. Standard regulations concerning quotations, freight charges and wages were among some of the more important motions adopted.

In February 1913 The Richmond Times-Dispatch carried a full page advertisement accompanied by a lengthy article on the Buckingham slate quarries. At this time approximately six hundred and fifty men were employed by the six companies mentioned. Men employed by the Arvonis Slate Company and the Arvon Slate Company which were not mentioned in the article would have made the number employed

205. Ibid., August 28, 1912.
upward of seven hundred. The article also stated that the latest steam hoisting and drilling equipment was being employed by all the quarries.

The Penlan Slate Company was one of the companies subscribing to the Times-Dispatch advertisement, but it was evident to all concerned that the company was losing heavily and would soon have to cease operating. The extreme difficulty encountered in mining slate through tunnels and the presence of excessive folds and faults in the slate vein rendered the removal of marketable slate too costly. By the summer of 1913 the company's assets were being liquidated and much of the usable operating equipment was sold to other slate companies.

By the end of 1919 only four companies, the Williams Slate Company, the Richmond Slate Company, the LeSueur Slate Company, and the A.L. Pitts Slate Company, were actively engaged in manufacturing roofing slate. The other slate companies, the Penlan Company, the Ferncliff Company, the Arvon Company, the Buckingham Company and the Arvonis Company were either idle or out of existence.

The coming of World War I and the sudden 10 per cent drop of

207. Ibid.
208. Pitts Papers, W.R. Rott to A.L. Pitts, January 28, 1913.
Slate sales in 1913 probably caused some of the above companies to postpone or cancel all operations.

Production figures for slate manufactured and sold by companies in Buckingham County or in the United States as a whole, indicate that prior to 1912 the slate industry was very stable. Slight increases or drops in production percentages could usually be interpreted to indicate significant trends in construction or in labor conditions.

Except for the slight slump in 1913, Buckingham slate sales at the beginning of World War I increased. In 1914 and 1915 sales were up over the 1912 figure 4.5 per cent and 7.9 per cent respectively. In 1916 there was a sharp drop of 15 per cent over 1912 sales, and by 1918 this drop had grown to 42.6 per cent. By 1919 production and sales climbed back to normal, but the extra expense involved in getting back to full production after a slack period caused the five companies operating in Buckingham at that time to sustain a total loss of $5,804.

E.E. Crooke, a master promotional agent, continued to attract interest to the Buckingham slate field even after the first two companies which he induced to enter the slate business had failed. In

1913, mainly through the efforts of Crooke, the National Slate Company of Virginia was chartered to operate in the Buckingham slate area with a maximum possible stock value of $900,000. The company's land holdings were not to exceed 100,000 acres. All members of the company, George W. Kirkpatrick, president, Clarence M. Plett, vice-president, Joseph Fritch, Jr., secretary and B. A. Richards, treasurer, were residents of Rochester, New York. The National Slate Company never grew beyond the charter stage, and for unknown reasons never manufactured slate in the Buckingham area.

Crooke attracted local as well as foreign interest, and in 1913 the Buckingham Slate Products Corporation, composed of a board of directors consisting of John B. Boatwright, president, Edmund W. Hubbard, vice-president and W.J. Hubbard, secretary, all of Buckingham, obtained a charter from the State Corporation Commission. The company was to operate with a maximum possible capital stock value of $750,000. The Buckingham Slate Products Corporation bought slate land at the north end of the Buckingham deposit near the Ferncliff property from Mr. Crooke, but never opened a quarry. In 1940 the company sold its land holdings to Harvey W. Ayers of Richmond for $2,725.

215. Ibid., p. 147.
216. Ibid., Deed Book XL, p. 267.
From 1913 to 1948 only two new companies opened quarries in the Buckingham slate field. One of these companies, the Arvonia Buckingham Slate Company, Incorporated, began operating during World War I when slates sales were at a low ebb. The other company, the Pitts Slate Corporation commenced quarrying under similar market conditions in 1933. The Arvonia Buckingham Slate Company came into existence in the spring of 1918 at a time when other quarries in the area were practically idle and managed to secure used quar­rying equipment at a very low price. 217 The company, with general offices in the Merchants National Bank Building in Richmond, Virginia, was a close corporation; and it was very ably managed by James T. Sloan, president, Owen R. Jeffrey, vice-president and general manager 218 and Robert C. Cabell, secretary and treasurer.

James T. Sloan and Robert C. Cabell, both well known business­men of Richmond at that time, managed slate sales in Richmond and elsewhere. Mr. Sloan and Mr. Cabell owned interests in the Arvonia Buckingham Company but to insure sufficient financial resources, Mr. Sloan persuaded the Branch family of Richmond to back the company. Thus with assured financial resources, the company began operations

217. Pitts Papers, James T. Sloan to A.L. Pitts, April 1, 1918.
218. Ibid.

(79)
on a large scale.

The real guiding power behind this company, however, was its vice-president and general manager, Owen R. Jeffrey. Owen Jeffrey, son of the well-known and respected Robert O. Jeffrey, had lived and worked in the Buckingham slate area for forty years prior to the formation of the Arvonia Buckingham Slate Company in 1918. Owen R. Jeffrey knew slate; he knew the workers of the slate fields; he understood perfectly the problems to be confronted by any company operating in the area; and last, but certainly not least, he realized the necessity of operating from a slate vein of proven value.

The property on which the company began operations was acquired by a number of purchases dating as far back as 1874 when Robert O. Jeffrey purchased slate land from Sam I. Williams. At his death in 1913 Robert O. Jeffrey left Owen R. Jeffrey and T. Stanley Jeffrey as sole heirs to his holdings.

Owen R. Jeffrey took charge of developing these holdings and personally directed the opening of the Arvonia Buckingham quarry which was located only a few hundred yards north of the Richmond Slate Company quarry in the center of an excellent slate vein.

221. Ibid., Deed Book II, pp. 120, 314.
222. Ibid., Deed Book XIX, p. 361.

(80)
Success was immediate. The slump of slate sales because of
the war had passed, and by 1919 production and sales were back to
normal. The Arvonia-Buckingham quarry was producing an excellent
quality of slate just as the post-war markets began to expand.

The company began growing from the start and in 1922 pur-
chased 259 acres of adjoining land from Louis F. Edwards. Several
other important purchases were made during these early years,
but the most important was arranged in 1924 when James T. Sloan
and Owen R. Jeffrey obtained a title to lands first purchased for
quarrying purposes by the Old Dominion Slate Company in 1868.

In 1924 the LeSueur Slate Company initiated a consolidation of
the LeSueur quarry, the Richmond Slate Company quarry and the old
Pierce quarry. The company, renamed the LeSueur-Richmond Slate
Corporation, was directed by William A. LeSueur, C. Fontaine LeSueur,
A.M. Sanders and Virginia L. Keel. The corporation's charter limited
maximum capital stock to $200,000. The LeSueur Corporation ad-
vanced rapidly and in 1928 was maintaining offices in Arvonia and
Richmond.

223. Pitts Papers, James T. Sloan to A.L. Pitts, August 19, 1919.
225. Ibid., Deed Books XXVII, p. 141, XXVIII, pp. 22, 66, 220, 475
   495, XXXV, 148, XXXIX, 456.
226. Ibid., Deed Book XXXII, p. 47.
228. Pitts Papers, W.A. LeSueur to A.L. Pitts, February 11, 1919.
The Blue Ridge Slate Company Incorporated of Albemarle County, Virginia, entered the Buckingham slate field in 1924 and erected a large mill for grinding waste slate on land leased from Jennie S. Jones and E.E. Roberts. In 1920 the corporation purchased forty acres of adjoining slate land from A.L. Pitts for $2,000. This forty acres included an old abandoned quarry which the Blue Ridge Company operates in 1948. The Blue Ridge Company utilized some of the 80 per cent waste that other quarries discovered to be a costly burden and with hugh stone crushers turned out slate powder and slate granules for pigment bases, composition roofing, cement ingredients and many other industrial uses.

Dr. Perkins Glover, Dr. C.W. Anderson and several other citizens of Arvonia tried to develop a small quarry near the Arvon Presbyterian church during the 1920's. The quarry was known locally, and appropriately so, as "Mud Hole". Ownership of the Mud Hole quarry changed hands several times but it was never profitably operated. All efforts to further develop this quarry were abandoned after the financial crash in 1929.

By 1928, the largest production year in the history of the Buckingham slate field, three roofing slate companies, the Williams Slate

229. County Records, Deed Book XXIX, pp. 116, 120.
230. Ibid., Deed Book XXXIII, p. 47.
231. Information supplied by Plummer F. Jones, New Canton, Virginia.
Company, the Arvonia-Buckingham Slate Corporation and the LeSueur Richmond Slate Corporation monopolized all the profitable quarries and most of the valuable slate land in the area. These companies realized the uselessness of carrying on active competition against one another and in 1929 organized a mutual benefit sales and policy making company called the Buckingham-Virginia Slate Corporation. The corporation's offices were to be located in Richmond and members of the individual companies were to act as directors. William A. LeSueur, president of the LeSueur-Richmond Slate Corporation, served very ably as president of the Buckingham-Virginia Slate Corporation from 1929 to 1943. The corporation proved to be a successful device for coordinating relations between the quarry owners and is today a very active organization. Officers of the Buckingham-Virginia Slate Corporation in 1948 are: Robert G. Cabell III, president, Maury F. LeSueur, vice-president, Owen R. Jeffrey, treasurer and John R. Williams, secretary.

The economic depression which seized the whole United States in its grip during the 1920's cut slate sales almost to the zero point, and in 1932 roofing slate production in the Buckingham quarries was lower than in any year since 1888. Every company

232. Unclassified Charters, 1929.
in the area had accumulated huge stock piles of slate; but for the
benefit of their workers managed to operate three or four months
each year.

New Deal recovery programs placed an emphasis on the erection
of permanent and substantial public buildings and by 1937 slate
production in Buckingham was almost back to normal.

While the four main slate companies operating in Buckingham in
1933, the Williams Slate Company, the Arvonia-Buckingham Slate Cor-
poration, the LeSueur-Richmond Slate Corporation and the Blue Ridge
Slate Corporation, were faced with large surplus slate stocks, a
new company, the Pitts Slate Corporation, began opening a quarry in
the area. The Pitts Slate Corporation was owned and operated by
Jack H. Spessard of Arvonia and his brother, Rutherford H. Spessard
of Richmond. The Spessard brothers obtained a lease to slate land
on the old Fontaine Field Tract from A.L. Pitts in 1933 and immed-
ately began removing top soil from the slate vein.

The Pitts Slate Corporation continued operations until 1936
when a freshet completely filled the new quarry; an old quarry
which had only recently been pumped dry, after many months of
tedious work, was also filled. This sudden disaster so discouraged

234. The Richmond Times-Dispatch, "Three Large Companies Now Operating
236. Unclassified Charters, January 24, 1923.
Jack Spessard that he called a halt to all operations. When a final balance was drawn up it was discovered that the company had lost approximately $26,000 over a three year period.

The failure of this company proved conclusively that a good slate vein is absolutely essential for successful quarrying. The Spessard brothers were excellent businessmen and employed only the very latest quarrying equipment and methods, but the quality of the slate blocks taken from the quarry was extremely poor. Poor slate quality necessarily caused the percentage of waste rock to be extremely high, and the handling and removal of this waste required so much time that the slatemakers stood idle during most of the day.

The corporation realized, too, that to keep on operating the new quarry under such conditions would be unwise and had begun developing an old quarry in the general area when the flood forced the company to close its books.

The Buckingham slate industry had returned to normal and was again producing slate on a large scale when World War II brought a complete halt to all quarrying activity. Building bans, as well as an exodus of slate workers to high paying government construction jobs, rendered slate quarrying impractical as well as impossible.

238. Ibid.
The Blue Ridge Corporation, engaged in grinding only waste slate, avoided the cost of quarrying by working from old slate dumps and managed to operate on a small scale throughout the war.

Just prior to World War II, in 1939, the American Slate Company Incorporated, headed by Charles C. Tremmell of Washington, D.C., president, L.J. Kidd of Albemarle, manager and John O. Dehlgren, secretary and treasurer, was granted a charter to operate in Buckingham County with a maximum stock value of $50,000. The company was primarily organized to produce crushed slate products and was associated with the Blue Ridge Slate Corporation. World War II came before the company could begin operations.

In the spring of 1946 the Williams Slate Company, the Arvonias-Buckingham Slate Company and the Lesueur Slate Company resumed operations at about one-third their pre-war level. In 1940 the three roofing slate companies had employed approximately four hundred and twenty workers. The Blue Ridge Corporation managed to maintain its small force of approximately thirty-five regular workmen.

The abnormal demand for slate during the post-war construction boom caused the slate companies to abandon their practice of selling

240. Unclassified Charters, November 2, 1939.

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slate according to grades and specifications. In 1946 only one grade and one thickness, three-sixteenth of an inch, was being produced.

In 1947 an entirely new type of company started operations in the Buckingham slate area. The new company, the Southern Lightweight Aggregate Corporation of Richmond and Norfolk bought slate property near the old Fernald quarry property and erected equipment for converting waste slate into material suitable for constructing lightweight building blocks.

In March 1948 the company had erected special boilers, kilns and conveyors at a cost upward of $150,000 and employed a total of twenty-six men. The equipment was powered by steam and electricity and was run continuously twenty-four hours each day.

The process used heat to expand crushed slate three to six times its natural size. This expanded product was loaded into open railroad cars and shipped to Richmond and Norfolk for further processing before being pressed into building blocks. By March 15, 1948 the output at the Lightweight Company's plant was approximately one hundred cubic yards per day.

242. Ibid.
244. Ibid.
245. Ibid.
By the summer of 1948 the slate industry was still not back to normal because of an acute labor shortage.
Buckingham County is thought of by most outsiders as being a very poor county and statistics certainly tend to justify their thinking. However, it would be better not to think of Buckingham as a poor county, but as an undeveloped county. In 1948 there is no large industry in the county, only one short railroad line, no public utility plants, and the population is almost entirely rural. Farming, lumbering, and slate quarrying, in order, are the main industries.

The Buckingham slate deposit, which produced approximately 3.8 per cent of the nation's roofing slate supply, is located entirely in Marshall district. Marshall is the county's wealthiest district and, until 1948, paid 30 per cent higher taxes on assessed value than the other four districts. However, most of the surplus wealth derived from the slate industry has not remained in the county, but has been distributed among quarry owners living in Richmond. Owen R. Jeffrey and C.F. LeSueur are the only large quarry operators who maintain residences there in 1948.

In spite of having to pay more tax than the other four districts, Marshall district did not become strong or even interested in county development until 1948. Thomas Nelson Dale, Slate in the United States, pp. 194-200.
politics until 1940. In 1940 Dr. C.W. Anderson of Arvonia was elected supervisor from Marshall district, and he has been backed to the limit by local citizens in his effort to secure an equalization of political power within the county.

The slate industry built Arvonia, the largest town in Marshall district. The population of Arvonia is hard to determine because definite limits to the town have never been set, but to say that one thousand people live there in 1948 would not be too far wrong. Most of the homes in Arvonia, while not pretentious, are neat and well kept. The people, through necessity, live thriftily and nearly all of them possess large lots on which they raise gardens or carry on small farming operations.

All of the slate companies in the Buckingham field today operate within the limits of Arvonia, Ore Bank and Arvon. No one knows the boundaries of any of these small villages, and together they are spoken of as just Arvonia.

Most of the quarry pits being operated in Arvonia in 1948 are three hundred or more feet deep and from two to three hundred yards wide. Equipment and methods, with a few exceptions, have not been changed since 1910.Ever since the progressive Buckingham Slate Company bought the first twenty horse power Talbot steam hoisting engine in 1868, quarry owners have been unusually reluctant to make
progressive changes. In 1948 the LeSueur Slate Corporation and
the Arvonis-Buckingham Slate Corporation purchased two diamond
toothed slate saws to help reduce the labor required in blockmaking.
The change to these saws was undoubtedly a necessity, since suffi-
cient skilled labor was not available for the old method of prepa-
ing blocks for the splitters.

A revolutionary change in transportation took place in the late
1920's when heavy duty trailer trucks, owned by the individual com-
panies, began hauling slate to markets formerly supplied only by rail
transportation. The change proved more economical than rail transporta-
tion, and the necessity of handling the slate several times before getting
it to the actual building site was eliminated entirely. The idea of
each company supplying its own means of transportation was certainly
nothing new in the Buckingham industry. The Buckingham Slate Company
owned and operated its private canal boat the "Phoenix" in 1869, and
could transport slate from New Canton to Richmond for fifty-four
cents per ton.

From the beginning of large scale slate manufacturing in Buck-
ingham, there has never been a time when builders hesitated to

247. *Journal of minutes of Buckingham Slate Company of Virginia*,
       Hotel, Richmond, Virginia. Hereafter cited as minutes of
       Buckingham Slate Company of Virginia.


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specify Buckingham slate because of its quality. As we have seen earlier, Rogers, in 1835, classed Buckingham slate along with the best in the world; Colonel Albert Ordway of the Buckingham Slate Company wrote in 1865: "In every market to which our slate has been sent it ranks with the best produced in this country." In 1880 an article in the Virginian stated that Buckingham slate would always have a market because of its superior quality.

The price of Buckingham slate has varied throughout the years since 1796, either because of demand, or because of difficulties in quarrying and in transportation. In 1796 the price was $15.00 per square, in 1835, $12.00, in 1893, $3.20, in 1912. $6.00, in 1928, $8.00, and in 1948, $27.00.

A number of medals have been awarded these slates at both national and international expositions. Among the most famous are: first award, London 1857; gold medal, Philadelphia, 1876; gold medal, St. Louis, 1904; gold medal, Louisiana Purchase Exposition, 1903.

Another advertisement and proof of the quality of Buckingham slates is their remarkable unfading quality. Slates placed on the University of Virginia, Virginia Mills, Trenton Mill and many other old buildings over a century ago, still have their original color.

249. Ibid., p. 18.
### TABLE I

**Approximate Value of Roofing Slate Produced in Buckingham County, Virginia for the Years Listed**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
<th>Year</th>
<th>Value</th>
<th>Year</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>1796</td>
<td>$1,125</td>
<td>1800</td>
<td>$190,211</td>
<td>1923</td>
<td>$299,000</td>
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<tr>
<td>1804</td>
<td>7,200</td>
<td>1801</td>
<td>180,970</td>
<td>1924</td>
<td>303,592</td>
</tr>
<tr>
<td>1807</td>
<td>32,228</td>
<td>1802</td>
<td>134,871</td>
<td>1925</td>
<td>304,010</td>
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<tr>
<td>1808</td>
<td>51,000</td>
<td>1803</td>
<td>104,324</td>
<td>1926</td>
<td>298,605</td>
</tr>
<tr>
<td>1808</td>
<td>54,000</td>
<td>1804</td>
<td>117,200</td>
<td>1927</td>
<td>368,616</td>
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<tr>
<td>1809</td>
<td>51,000</td>
<td>1805</td>
<td>132,618</td>
<td>1928</td>
<td>418,141</td>
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<tr>
<td>1812</td>
<td>50,000</td>
<td>1806</td>
<td>156,772</td>
<td>1929</td>
<td>291,540</td>
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<tr>
<td>1814</td>
<td>45,505</td>
<td>1807</td>
<td>156,603</td>
<td>1930</td>
<td>283,300</td>
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<tr>
<td>1815</td>
<td>58,187</td>
<td>1808</td>
<td>175,521</td>
<td>1931</td>
<td>167,594</td>
</tr>
<tr>
<td>1816</td>
<td>59,800</td>
<td>1809</td>
<td>182,708</td>
<td>1932</td>
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<tr>
<td>1817</td>
<td>57,000</td>
<td>1810</td>
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<td>1933</td>
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<tr>
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<td>60,540</td>
<td>1811</td>
<td>170,800</td>
<td>1934</td>
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<td>113,079</td>
<td>1812</td>
<td>176,544</td>
<td>1935</td>
<td>122,596</td>
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<tr>
<td>1819</td>
<td>127,619</td>
<td>1813</td>
<td>168,747</td>
<td>1936</td>
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<tr>
<td>1820</td>
<td>150,000</td>
<td>1814</td>
<td>184,126</td>
<td>1937</td>
<td>226,634</td>
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<td>1821</td>
<td>150,347</td>
<td>1815</td>
<td>189,551</td>
<td>1938</td>
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<tr>
<td>1824</td>
<td>188,161</td>
<td>1816</td>
<td>149,435</td>
<td>1939</td>
<td>182,829</td>
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<tr>
<td>1825</td>
<td>111,357</td>
<td>1817</td>
<td>122,342</td>
<td>1940</td>
<td>243,570</td>
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<tr>
<td>1826</td>
<td>107,863</td>
<td>1818</td>
<td>99,651</td>
<td>1941</td>
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<tr>
<td>1827</td>
<td>145,370</td>
<td>1819</td>
<td>180,260</td>
<td>1942</td>
<td>303,592</td>
</tr>
<tr>
<td>1828</td>
<td>150,046</td>
<td>1820</td>
<td>226,050</td>
<td>1943</td>
<td>281,597</td>
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<tr>
<td>1829</td>
<td>132,110</td>
<td>1821</td>
<td>281,597</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and lustre.

Probably the best advertisement for Buckingham slate is that it covers some of the finest buildings, public and private, in the United States. Among these are the College of William and Mary, Williamsburg, Virginia; Eno Memorial Hall Library, Simsbury, Connecticut; Governor's Mansion, Richmond, Virginia; Harvard School of Business Administration, Cambridge, Massachusetts; Klise Memorial Chapel, Grand Rapids, Michigan; New York Geological Library, New York, New York; Tammany Hall, New York, New York; the University of Rochester, Rochester, New York; University of North Carolina, Chapel Hill, North Carolina; University of Virginia, Charlottesville, Virginia; Forney Johnston Residence, Birmingham, Alabama; Glen Phelps Residence, Riverside, Connecticut, Eli Lilly Residence, Broad Ripple, Indiana; Colonel Hansford McNider Residence, Mason City, Iowa; Edsel Ford Residence, Seal Harbor, Maine; Farnsworth Residence, Pelham, New York, Baltimore Country Club, Baltimore, Maryland; Honorable L.C. Phipps Residence, Denver Colorado; Post Office Department Building, Washington D.C.; Missouri Supreme Court Building, Jefferson City, Missouri; and the Telephone Building, Shreveport, Louisiana.

In 1948 possibilities are great for any company willing to

251. Robert Rotvest, Characteristics of Buckingham, Virginia Slate, n.p
acquire the necessary slate lands and introduce the more modern means of quarrying on a large scale. As had just been seen, there has never been a lack of demand for Buckingham slate, and with adequate advertising sufficient demand could be aroused all over the United States to justify the expenditure of large amounts of capital for manufacturing what has proved itself to be a remarkable natural product.

Stephen Taber estimated the depth of the Buckingham slate deposit to be about one thousand feet and the deepest quarry in the area is only about three hundred and fifty feet. There is still, in 1948, much undeveloped slate land in Buckingham, and modern geological testing methods should enable prospective quarry operators to open quarries on good slate veins.

It is a certainty, however, that the history of the Buckingham slate industry will continue for many years to come.
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