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A BRIEF OUTLINE
OF THE
RESOURCES
AND
LAND SYSTEM
OF THE STATE OF
WEST VIRGINIA

BY

WALTER C. REDDY, C. E.,
EXPERT SURVEYOR AND MEMBER OF THE WEST VA. BAR.,
CHARLESTON, W. VA.

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ERRATA.

- Page 10—Second paragraph for "ports" read "parts."
Page 14—Second paragraph for "Barreus" read "Barrens."
Page 14—Fifth paragraph for "herer" read "here."
Page 16—2nd paragraph 2nd line for "XIII" read "XII."
Page 23—4th paragraph, 5th line for "senor" read "senior."
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INTRODUCTORY.

The rapid flow of capital into West Virginia from all parts of the country seeking investment in its rich coal and timber lands, which began in 1900, created a wide demand for reliable and general information regarding the resources of the State, particularly as to its coal areas and the condition of its land titles.

Owing to the lack of any State publication covering this ground, such information has been obtainable only as the result of special investigations, undertaken at considerable expense and covering selected areas only; and the cost and time required for these preliminary investigations, without which no investment can be considered safe, has in many instances prevented investors from remaining with us, and in some cases has brought disaster upon too hasty purchasers.

Realizing the demand for some general guide covering the ground indicated, the writer, who has made a special study of these matters for the past ten years, presents this booklet to the public, trusting that it may aid investors in the selection of valuable territories and advance the development of some sections of the State whose resources are not generally known.

The treatment of matters herein is necessarily brief, but full information on any desired points may be obtained by addressing the writer. All correspondence will be cheerfully answered.

Respectfully,

WALTER C. REDDY.

Charleston, W. Va., August, 1902.

THE OHIO COAL BASIN.

The State of West Virginia lies within the Appalachian Coal Field or great Ohio Coal Basin.

This basin includes parts of nine States and embraces some 60,000 square miles.

Of the territory included, West Virginia not only contains the largest area of any State, but occupies the broadest and richest portion of the basin.

The coals of the basin are divided by geologists into three classes corresponding to the geological divisions or formations which contain them. These are

1. "The Lower Coal Measures," or No. XII of Virginia Geology, known in Pennsylvania as the "Pottsville Conglomerate," and containing the Pocahontas-New River Coals.

2. "The Middle Coal Measures", No. XIII, known in Pennsylvania as the "Lower Coal Measures", and containing the Kanawha-Alleghany Coals.

3. "The Upper Coal Measures", Nos. XIV, XV, and XVI, embracing the Pittsburg and associated coal-beds.

These three geological divisions may be compared to three coal and rock-made, shallow, canoe-shaped dishes of different sizes and enormous dimensions placed one within the other, the Lower Coal Measures, No. XII, upon the bottom and the Upper Coal Measures on the top, with the Ohio River flowing approximately through the center of the uppermost. These formations rest synclinally (basin or trough shaped) one upon and within the other, and thin westwardly in a north-west direction. Southeast of the Ohio they dip to the north-west and after passing under the river rise again in the same direction.

WEST VIRGINIA COAL AREAS.

All of these geological formations are present in West Virginia and dip towards the north-west with their included coal beds, at a rate varying from 40 to 80 feet per mile. Each of them consists of alternating sandstones, slates, and shales interspersed by coal beds, the dividing lines between them being certain well-defined rocks which may be readily traced over the entire State.

Recalling the "dish-like" arrangement of these formations, and of their component parts, one within the other, it is evident that in going north-west from any point on the south-eastern edge of the basin in West Virginia to the Ohio River, we would cross the edge of each dish in succession reaching approximately the center of the uppermost at the Ohio River; or, in other words, we would pass through the several geological formations already mentioned, and the coal beds each contains, coming to each coal bed in ascending order.

The lowermost of the dishes referred to rests upon a bed of limestone known as the Greenbrier Limestone or Umbral Shales (No. XI) and the line between them is plainly marked, extending in a north-east and south-west direction across the State, approximately from Bramwell, Mercer County, along and north of the Bluestone River to Meadow Creek on New River, then just north of Williamsburg in Greenbrier County to a point about five miles west of the Greenbrier River and along the same to a point about five miles west of Marlinton, then to a point about the same distance west of Beverly, and along the eastern slope of the Laurel Hills to the Pennsylvania line.

North and west of this line lies the coal basin of West Virginia; and south and east of it, except in a detached portion of the basin lying in Mineral, Grant, and Tucker counties, of which mention will be made later, there is no coal.

TOPOGRAPHY.

The topographical or surface features of the coal basin in West

Virginia are everywhere the same, differing in size and proportion rather than in character.

The general surface viewed from above is that of a widely extended, westward sloping, undulating plateau, varied in places with ridges, the water-sheds of the main streams, trending towards the north-west; and ribbed at right angles to the general direction of the water flow by other ridges, locally called mountains, made by the outcroppings of the great sand rocks of the coal measures.

Down into this general plateau-like surface the streams of the country have everywhere furrowed out for themselves channels more or less deep into or through the various rocks and coal beds of the formations.

The main streams flowing north-westwardly have cut directly across the edges of the rough "dishes" before mentioned, while the feeders of these streams, running into them from right and left, have cut down with and into the edges of the formations and thoroughly exposed every portion of them.

Without a proper understanding of these topographical peculiarities no one can realize how easily and cheaply the many coal beds of the West Virginia portion of the great coal basin can be reached and mined.

Every valley is an open drift, and every coal bed can be reached in one place or another from daylight above water level.

THE NEW RIVER-POCAHONTAS COAL.

The territory most esteemed in West Virginia, and perhaps in the world, for superior coking coal is embraced in the No. XII formation. This is included as a whole between the Greenbrier Limestone on the bottom, and a heavy sandstone known as the "Homewood" in Pennsylvania, but better known in West Virginia as the Kanawha Falls rock, on the top. This last named rock forms the "roughs" of Tug River above Wharncliffe, Mingo County, and outcropping north-westwardly forms the "roughs" of Guyan near Little Huff Creek—the Kanawha Falls on Kana-

wha River, the Cliffs along the Gauley River and upper Elk, and the western *escarpement* of the Rich Mountain and Laurel Hills.

This formation contains several workable beds of coal, ranging from 3 ft. to 9 ft. in thickness, which outcrop in the counties of McDowell, Mercer, Raleigh, and Wyoming, (which counties compose the "Flat Top" Field;) and in the counties of Fayette, Nicholas, Greenbrier, Webster, and Pocahontas, (which compose the "New River" Field).

The counties named are the only ones containing this coal in workable thickness.

In the Flat Top field we find in ascending order four workable beds, viz:—

1. Pocahontas bed No. 3, 9 ft.
2. Pocahontas bed No. 4, 5 ft.
3. Pocahontas bed No. 5, 4 ft.
4. Pocahontas bed No. 10, 5 ft.

In the New River Field we have:—

1. Quinimont bed, 4 ft 5 in.
2. Fire Creek bed, 3 ft. 6 in. to 5 ft.
3. Nuttall bed, 3 ft. 6 in.

From recent investigations it appears probable that the Pocahontas bed No. 5 is identical with the Quinimont, and the Pocahontas No. 10 with the Fire Creek.

The Pocahontas bed No. 3 is not present on New River, but all of these coals are of nearly same character and quality regardless of their thickness.

The peculiarly desirable features of this coal are its superior coking qualities and its excellence for steam purposes.

Analyses and tables of production can be found in the reports of the State Inspector of Mines, from 1897 to date.

A considerable area of this coal is also found in Buchanan and Tazewell Counties in Virginia.

THE KANAWHA-ALLEGHANY COALS.

These coal beds, some six in number, are embraced in the second

grand division of the coal basin, No. XIII; and while they are found and mined in many counties of the State their great development along the Kanawha River has given them the name of Kanawha or Kanawha-Alleghany Coals, the Alleghany River being the locality of greatest development in Pennsylvania.

The No. XIII formation is included between the Kanawha Falls rock on the bottom and a heavy, buff sand-rock known as the "Mahoning Sandstone", on the top, which latter is accompanied in the south-west by the "Black Flint Ledge".

This sandstone and black flint ledge outcrops approximately along a line from a short distance above Wayne C. H. north-east through Charleston, up Elk River along the south side to Clay C. H. and Sutton, and leaving Elk River at the mouth of Holly River, north-east to Philippi on the Tygarts Valley River; then following that stream to the Valley Falls in Marion County, and then extending north-east, passing a few miles east of Morgantown to the Pennsylvania line. The outcrop area embraces the territory between the outcrop of this sand-rock and the previously described line of the Kanawha Falls rock, and is naturally divisible into four sections:—

1. The South-western or Thacker Field, embracing the counties of McDowell, Mingo, Wayne, Logan, and Lincoln.
2. The Kanawha or Central Field, embracing Boone, Raleigh, Kanawha, Clay, Nicholas, Webster, and Braxton Counties.
3. The Northern Field, embracing Upshur, Randolph, Barbour, Preston, Marion, and Monongalia.
4. The Potomac Field, composed of a detached portion of the belt lying to the eastward in the counties of Mineral, Grant, and Tucker.

The workable coal beds of the belt, some six in number, are divided by geologists into three classes according to the Pennsylvania nomenclature, viz: The Clarion, Kittanning, and Freeport beds.

These names are derived from certain localities in Pennsylvania where the development of these coal beds is greatest.

In West Virginia these coal beds occur with even greater devel-

opment and regularity than in Pennsylvania, but are better known by local names peculiar to the neighborhood of their development.

The following tables show the number, thickness, &c., of these coal beds, together with the local and Pennsylvania names, the latter being retained by geologists for the purpose of preserving a settled system of nomenclature by which these coal beds may be identified in different sections of the basin.

(A) *Kanawha Field Proper.*

In the Kanawha field we have in ascending order

No.	Pennsylvania Name.	Thickness.	Local Name.	Character of Coal.
1	Clarion	4 ft. 6 in.	{ Eagle or No. 1 Wyant Seam	} Coking.
2	Lower Kittanning	5 ft. to 9 ft.	{ Coal Valley Gas, Powellton, Campbells Creek, Ansted, No. 2 Gas,	} Steam, gas, and coking.
3	Middle Kittanning	3 ft. to 4½ ft.	{ Cedar Grove, Peerless, Lens Creek,	} Gas, Steam, and Coking.
4	Upper Kittanning	5 ft.	{ Excelsior, Winnifrede,	} Gas and steam.
5	Lower Freeport	5 ft. to 7 ft.	{ Belmont, No. 5 Block,	} Gas and Steam.
6	Upper Freeport	5 ft.	{ Lewiston, Kelly's Creek,	} Splint.

(B) *Northern Field.*

In the Northern field all of these coal beds are present, but do not show the same degree of development as in the Kanawha Field. Here we find the No. XIII coals as follows:—

No.	Pennsylvania Name.	Thickness.	Remarks.
1	Clarion,	2 ft. 6 in.	{ Slaty and impure, not mined.
2	Lower Kittanning,	4½ to 9 ft.	{ Slaty, 4 ft. good coal, not mined commercially.
3	Middle Kittanning,	4 to 7 ft.	{ Slaty, 2 ft. good coal, not mined commercially.
4	Upper Kittanning,	2½ ft.	{ Sometimes absent, not mined.
5	Lower Freeport,	5 ft. 10 in.	{ Slaty, 2 ft. good coal, not mined.
6	Upper Freeport,	4 to 6 ft.	{ Mined in Preston and Barbour and known as the Austin or Oakland seam, fairly good coke.

The lack of further development in the XIII coals in the counties of this field is largely due to the greater value of the Pittsburgh bed, which occupies practically the same territory.

(C) *The Potomac Field.*

Much the same conditions prevail here as in the Northern Field. The Clarion bed is too thin to be valuable, and the remaining beds of the XIII coals, except the Kittanning are slaty and impure.

The Kittanning seams are mined in Mineral and Tucker counties as follows:—

Pennsylvania Name.	Thickness.	Local Name.	Remarks.
Lower Kittanning,	6 ft.	Coketon, Six Foot, Gas Coal, Thomas No. 1.	} Steam, coking, and smithing.
Upper Kittanning,	8 ft.		

This latter bed is formed by a combination of the Middle and Upper Kittanning beds and its extent is local merely.

As in the Northern Field the close proximity of the Pittsburg bed has delayed the development of the XIII coals on the Potomac.

(D) *The South-Western Field.*

Developments in the XIII coals in this field are in their infancy, and with a few exceptions no distinctive local names have yet attached to these coal beds. All of the coals of the XIII Measures are to be found in this field and all of workable thickness.

No.	Pennsylvania Name.	Thickness.	Remarks.
1	Clarion,	4 ft.	{ Not yet mined commercially.
2	Lower Kittanning,	5 ft. to 6 ft.	{ Known as the "Thacker Coal", gas and splint, extensively mined.
3	Middle Kittanning,	3½ ft.	{ Not yet mined commercially.
4	Upper Kittanning,	4 ft. to 6 ft.	{ Same.
5	Lower Freeport,	5 ft. to 7 ft.	{ Same.
6	Upper Freeport,	5 ft. 6 ft.	{ Known as "Dingess Seam", splint coal, mined at Dingess.

The coal bed most worked in this field to date is the "Thacker" or Lower Kittanning bed. This runs from 5 ft. to 6 ft. in thickness of good coal, and is the same bed as the Ansted, Campbells Creek and Powellton of the Kanawha Field, although it does not appear to make so good quality of coke. Some excellent properties are in market in this field. Full information regarding them may be had of the writer.

THE PITTSBURG COALS.

The uppermost of the geological grand divisions of the coal basin has been classed as the Upper Coal Measures, but geologists have subdivided this into three other sections as follows:—

- 1st. The Barreus or Elk River series, (XIV).
- 2nd. The Upper Coal Measures proper, (XV).
- 3rd. The Permo-Carboniferous, (XVI).

—XIV.—

The first of these, with an outcrop area of some 1500 square-miles, covers the territory included between the Mahoning Sandstone and the Pittsburg Coal bed. It consists for the most part of massive sandstone and shales, interspersed with a few coal beds. These rocks are particularly well exposed along Elk River; hence the name Elk River Series.

The coals of this series are not persistent over any considerable area and run thick and thin even on adjoining farms. Their greatest development is in Clay and Kanawha counties and in Boone and Lincoln. Herer are found generally three workable beds, viz: the Upper and Lower Cannelton and the Mahoning, running from 4 ft. to 7 ft. in thickness. These are excellent block coals, and often turn to pure cannel over considerable areas. These are the ecals of Davis Creek in Kanawha county, and are also developed at many points along Elk River, and in high ridges along the Kanawha above Charleston.

In the territory mentioned the arrangement of these beds is in ascending order about as follows:—

1. Black Flint Ledge,	5 ft.	} Pittsburg Coal over Flint Ledge 500 to 700 ft.
2. Lower Cannelton Coal (Cannel seam on Smithers Creek)	4 ft.	
3. Interval,	70 ft. to 120	
4. Upper Cannelton (Queen Shoal and North Coalburg bed)	6 ft.	
5. Interval,	100 ft. to 150	
6. Coal (Mahoning). (Black Band seam)	4 ft.	
7. Interval,	300 ft. to 400	
8. Pittsburg Coal,	6 ft.	

—XV.—

The next formation, known as the Upper Coal Measures proper, contains some six coal beds only four of which are of workable thickness, and only one of which, the Pittsburg bed, is of commercial value, over the entire area of outcrop.

This series is included between the Pittsburg Coal bed and another coal bed known as the Waynesburg, the arrangement being somewhat as follows in ascending order:—

1. Pittsburg Coal, 4 ft. to 8 ft.
2. Interval, 50 ft.
3. Redstone Coal, 1 1-2 ft. to 3 ft., often absent.
4. Interval, 40 ft.
5. Sewickley Coal, 1 to 6 ft., often absent.
6. Interval, 250 ft.
7. Waynesburg Coal, 3 ft. to 5 ft., often absent.

None of the coal beds mentioned is mined commercially, except the Pittsburg. Its outcrop extends through the counties of Mason, Kanawha, Putnam, Roane, Clay, Braxton, Gilmer, Lewis, Upshur, Harrison, Barbour, Marion, Taylor, Monongalia, Marshall, Ohio, Brooke, and Hancock, with a detached portion in Mineral, Grant, and Tucker. In no case has the Pittsburg coal been found less than 4 ft. in thickness, and it frequently runs to 8 ft. and over. It is persistent over the entire area indicated, and even where it has disappeared below water level it is found by shafting always in excellent condition.

—XVI.—

Above the Waynesburg coal lies the uppermost division of the coal basin—designated Permo-Carboniferous. The coal beds of this series are rarely over two to three feet in thickness and of very little economic value. But beneath a great portion of the territory covered by the outcrop of this series, the Pittsburg coal may be reached by shafting, and much land in this formation is being purchased with this end in view; notably in the counties of Jackson, Roane, Calhoun, Ritchie, Doddridge, and Wetzel.

ADDITIONAL AREAS BY SHAFTING.

The belts just described embrace the areas over which the coal beds of the different formations outcrop or have surface exposure, and consequently the territory over which they are most easily mined; but it must be noted that the coals of each series can often be mined commercially after they have been carried under water level by the dip of the formations for considerable distances, and that in many territories where the outcrop of one series is found the coals of the next series below may be also reached by shafts of moderate depth.

XII It has been demonstrated, however, that the coals of the Lower Measures (XIII) do not maintain workable thicknesses for very long distances after the final disappearance below water level; but this is not the case to any great degree with the coals of the Kanawha and Pittsburg series, these often being mined commercially at depths of several hundred feet, and at points from 10 to 15 miles beyond the disappearance line.

GENERAL REMARKS.

To sum up:—The commercially important coal beds of the State are some twelve in number. Six of these, the Pocahontas No. 3 and 4, and the Quinnimont, Fire Creek, Nuttall and Clarion, are the best coke producers. The Kittanning Beds, especially the lower, also produce a good coke and are the most widely distributed coals in the basin. While not so good a coking coal as the New River and Pocahontas, the Lower Kittanning is highly esteemed for its regularity, both of thickness and quality.

Its thickness renders it cheaply mined, and its value as a steam coal, together with the coking of the slack, makes its operation extremely profitable.

The Cedar Grove or Middle Kittanning bed produces the best steam coal obtainable.

The Freeport beds in the north-easter section of the State produce a fair coke, but going south-westward the character of the coal changes to a hard splint, excellent for domestic use.

The Pittsburg bed is the coal principally mined in the northern section of the State. In the north-east it produces a good coke, but in Mason and Putnam counties its character changes to a domestic splint.

The territory in which each of these coals outcrops has already been indicated.

To the investor many excellent opportunities are offered for the purchase of lands containing these coals at very reasonable prices, and from the outline herein given proper territories may be selected for any particular coal desired.

Full and detailed information regarding any particular field, with maps, reports on lands in market, &c., may be had by addressing the writer.

OTHER MINERAL RESOURCES.

(A) *Iron Ores.*

The great iron ore belt of the State extends through the counties of Monroe, Greenbrier, Pocahontas, Pendleton, Grant, Hardy, Hampshire, Mineral, Jefferson, Berkeley, and Morgan.

It is an extension of the "Rich Patch" region of Virginia and contains the same ores, embracing the Hematites of the Potsdam and Oriskany series and the Fossiliferous ores of the Clinton.

The beds run from 2 ft. to 12 ft. in thickness and are extremely rich, but difficult to mine owing to the convoluted condition of the rocks enclosing them.

Their close proximity to the coal field, however, and the abundance of limestone close at hand, might, with the building of a railway, and cheap transportation, make their operation profitable.

Considerable deposits of *Manganese* are also found in these counties associated with these ores.

Other beds of Iron ore are found in the coal measures. They are generally irregular in character, but in many places are suffi-

ciently thick to be of commercial importance. No iron furnaces are now in operation in the State, but it is more than likely that these ores will not be long neglected. Particularly good deposits of these ores are found in the counties of Barbour, Braxton, Calhoun, Clay, Fayette, Harrison, Kanawha, Monongalia, Nicholas, Preston, Taylor, and Wayne.

(B) *Salt.*

Salt water sufficiently strong for the manufacture of salt is found in the counties of Kanawha, Nicholas, Marshall, Mason, Wayne, and Webster. Much salt is manufactured in the Kanawha Valley.

(C) *Fire Clay.*

Excellent fire clays are found widely distributed over the State in beds ranging from 4 ft. to 20 ft. in thickness. Particularly fine deposits are found in Berkeley, Cabell, Fayette, Gilmer, Grant, Hampshire, Hancock, Hardy, Harrison, Kanawha, Lewis, Logan, Monongalia, Morgan, Mineral, Marion, Marshall, Preston, Putnam, Summers, and Wood. The brick and tile-making industry of the State is very large.

(D) *Marble.*

A good quality of marble is found in Greenbrier, Hampshire, Jefferson, Mercer, Ritchie, Monroe, and Pocahontas. Much of it is manufactured, and the industry is growing.

(E) *Plumbago or Graphite.*

This has been found in small quantities in Pendleton, Hampshire, and Monroe, and indications point to a large deposit; but this has not yet been fully investigated.

(F) *Ochre.*

Yellow ochre is found in Wayne in large quantities. It makes a good paint. Deposits are also reported in Pendleton.

(G) *Lead.*

This has been reported in many counties of the State, but its presence is doubtful. Still there are certain areas which might repay investigation—notably in the counties of Hampshire, Mineral, Grant, Tucker, Pendleton, Pocahontas, and Greenbrier.

(H) *Gold.*

In Monroe county the gold-bearing rocks of Virginia pass slightly inside the State line. Here a ledge about 8 ft. thick and assaying about \$5.00 per ton has been found. This same ledge also runs through Mercer County and Tazewell, Virginia.

Its development is being undertaken in Monroe county.

THE VIRGINIA LAND SYSTEM.

Prior to the Civil War West Virginia was included in the State of Virginia and the titles of all lands within the borders of the present State of West Virginia are derived originally from the Commonwealth of Virginia through land warrants and grants made by the Old Dominion.

These land warrants were in many cases issued for military services rendered, but the usual method of acquiring them was this—

The early laws of Virginia provided that any person, by paying into the State Treasury two cents per acre for the number of acres of public lands he wished to take up, could obtain from the Treasury office a land warrant authorizing him to do so.

After securing the warrant he would file an "entry" with the surveyor of the county in which was located the public lands he

desired to take up; and the surveyor would then survey out to him the number of acres called for by the entry and mark the boundaries of the same.

The surveyor delivered a copy of this survey to the Land Office at Richmond, and on this was based a Grant, under the seal of the State, and the signature of the Governor, to the party making the entry or his assigns. And by this Grant, or Patent as it is often called, all the *title of the State* to the land so entered was transferred to him.

The object of these wholesale grants was to settle up the wilderness of Western Virginia and make it a source of revenue to the State by means of taxation; and they were made for all quantities of land, from one acre up to five hundred thousand acres.

While this object was good, the method employed was bad, and the Virginia Land System was from its first inception susceptible of the most flagrant abuses. No connected maps of the surveys made were preserved, the lines between the counties were poorly defined, and the country being in the wilderness was often strange to the surveyors. Thus the surveyor of one county often extended his system of surveys over into an adjoining county and *vice versa*.

Often, too, the county surveyors would intrust the performance of their duties to deputies, who, making surveys for various parties, kept no track of each other, and thus often covered the same land with several sets of claims. There were also many surveyors who would willfully cover the same land twice or three times for the sake of fees instead of referring the prospective patentee to other counties where lands were yet vacant.

Again, owing to the wildness of the country and their disinclination to go over it, the surveyors would plat surveys in their offices, starting them from some point whose location was known to them and call the lines to run certain distances in certain directions from this point and around to it again, so as to enclose a certain number of acres of land.

In so doing they would not know accurately where these lines would run upon the ground, and would generally enclose within

them other surveys previously made. Again, other surveyors, ignorant of the location of these "platted boundaries", would make subsequent surveys within them for later patentees.

Finally, these surveys, even when actually made, were generally carelessly done. The measurements were seldom correct and other errors were abundant.

It is thus seen that under this system, and its careless mode of execution, it was possible for several different parties to obtain grants from the State for the same lands, and each could acquire a legal and valid title, so far as the record showed from the Commonwealth of Virginia to them, the State not concerning itself with the disputes which might arise except by later providing laws by which they might be settled.

As stated the object of these wholesale grants of land was to make the western wilderness revenue producing. But the object failed. Most of the lands were entered in large surveys by non-resident speculators, who failing to dispose of them failed also to pay the taxes due. Not only this, they failed even to have their lands entered in the land books and properly charged with taxes, seeking an evasion of payment.

The Legislature vainly attempted to make these lands revenue producing, and from 1781 to 1838 hardly a session passed without some legislation on this subject;—first authorizing the sale of delinquent lands by the sheriff of the county in which they were situated, and finally absolutely forfeiting such lands as had not been entered on the land books and charged with taxes, and vesting the title to them in the president and directors of the Literary Fund, for the benefit of which they were to be sold by an officer in each county, known as the Commissioner of Delinquent and Forfeited Lands. (Act of 1838.)

In the meantime lands delinquent for taxes or forfeited for non-entry were subject to resurvey and new patents had been laid on them in the same slipshod fashion as had at first prevailed with the original grants. With the Act of 1838 these re-entries were suspended and the Commissioners in the various counties divided up the forfeited surveys into lots of suitable

size, excepting the junior grants, &c., in actual possession, or having taxes paid and sold them as directed.

Most of the early surveys suffered this fate, but many were overlooked and a few had had their taxes regularly paid.

Thus the matter practically stood till the formation of the State of West Virginia in 1863; but patents still continued to be issued as before, though not described as re-entries.

WEST VIRGINIA MODIFICATIONS.

On the formation of the State of West Virginia the Constitution provided that all land titles and rights derived from or under the laws of Virginia prior to the adoption of the Constitution should remain valid and secure. All lands forfeited to the State of Virginia were vested in the State of West Virginia, but the former owners were given five years to redeem the same by the payment of back taxes due.

It was made the duty of each land owner to have his land properly entered on the land books of the proper county and charged with taxes; and a failure to do this for five successive years should forfeit the title to such lands, the forfeiture to inure to the benefit of all adverse claims on the same, whatever their nature, provided taxes on such claims had been properly charged and paid for the five years mentioned. And all the remainder of the real estate so forfeited, and not so passing to other parties, should be sold for the benefit of the general school fund, by an officer known as the Commissioner of School Lands, in each county. But the former owner at any time before such sale, might redeem such remainder, by paying the taxes and all costs.

By recent legislation these proceedings are now conducted through the chancery courts, by suits in the name of the State against the land and all parties claiming any portion of it, under any title whatever.

Lands properly charged and delinquent for taxes, were to be sold by the sheriffs of the counties in which situated, for the amount of the taxes and costs due. And if such lands could not

be sold for enough to pay such charges, the sheriff was to become the purchaser for the State of West Virginia.

In either case, the owners were to have one year to redeem, by paying the original charges with 12 per cent interest; and if redemption was not made, title passed either to the individual purchaser (by deed of the County Clerk) or to the State, for subsequent sale by the Commissioner of School Lands. Proceedings by such commissioner are now made by chancery suit, as before mentioned.

In this way many worthless titles, abandoned by their owners have reverted to the State, and have been by these Sheriffs' and Commissioners' sales again started on their rounds to defraud innocent purchasers.

In these sales transfer is made by the State only of such title as was originally forfeited and with several reservations as to the rights of infants and persons under disability. Also, until quite recently, these sales have been most irregularly conducted, and may be regarded as open to attacks on all sides.

Lastly, the new constitution provided that ten years peaceable, notorious and undisturbed possession of any tract of land, under any color of title, and payment of taxes for five successive years, should create a good title to any adverse claim, even though the senior title may never have been forfeited. Much land is taken from the original owners in this way and often without their knowledge.

THE PROPER COURSE FOR PURCHASERS.

From the foregoing it appears that many matters should be carefully investigated before closing any transaction in West Virginia Real Estate.

Briefly, they are:—

1. A complete abstract of the recorded paper title.
2. An examination on the ground to ascertain all adverse claims upon the property, their area and status.
3. An investigation of the boundary lines, corners, area, &c.

4. An examination as to the natural resources of the tract.

Failure to make these examinations too often brings disaster upon purchasers.

A good abstract of title should show all conveyances affecting the title to the land, all of its incumbrances in the shape of mortgages or deeds of trust, all wills with the date and manner of probate, all liens such as unpaid taxes, judgments, and executions, suits past and pending touching the title, attachments levied on the land, leases, &c., and particularly the past tax record.

This examination should trace the title directly back to the Commonwealth of Virginia and start with the original grant.

But even such an abstract is not sufficiently complete; for it must be remembered that an old title with clear paper record does not always mean a perfect title to the land described; for the location of the old surveys did not prevent younger titles from having grants to the same lands, as has been before explained, and the existence of perhaps three or four equally perfect paper titles to it.

In such cases the question of title must hang upon the nature and extent of the actual possession, and this can not be determined from the paper record.

One of the most curious and remarkable facts connected with West Virginia investments is the haste and carelessness with which most real estate transactions are conducted.

Men who would not invest a dollar in New York City or Cincinnati real estate without the most careful examination of the title will recklessly come to West Virginia and pay out thousands with no examination at all, and this in a State where the looseness of past real estate transactions, the imperfection of county records, and the peculiar nature of the land system have been subjects of general comment for years.

Such investors too often discover the whole or partial worthlessness of their claims only when undertaking to develop them.

Then they may find that they lie either wholly or in part within the lines of older surveys having superior title, or that the land is partially covered by adverse claims ripened into valid titles by

possession, or that the boundary lines, perhaps involving large portions of it, are disputed by neighboring owners, or that taxes have remained unpaid, and other important matters which lack of space forbids mention of here, all important yet not appearing on the record except in isolated cases.

The necessity for careful and thorough examination, both of the records and of the ground itself, by parties familiar with matters of this character and competent to undertake them, would seem to be clearly shown.

And it is certain with such examination so made, and the reports obtained fully heeded, there need be no more danger in purchasing West Virginia lands than those of any other State in the Union.

REPORTS.

The writer, having had ten years personal experience in tracing and locating the various coal beds of the State, and in examining its land titles, and being by recently completed arrangements in close business connection with thoroughly competent men in each of these lines in every county, is prepared to furnish to interested parties complete and reliable reports on the mineral resources of any lands in the State, together with maps, surveys and abstracts of title. By gathering such Reports together in a central office at the State capital, where are deposited the Land Books and original Grants covering each county, the writer is enabled to place within the reach of investors, information covering all desired points at a considerably less cost, both of time and money, than such information can be obtained in any other way.

In the examination of titles especially it is necessary often to trace through the records of more than one county. If the investigation be conducted locally it is necessary to employ a man in each county, thus doubling the cost. I can furnish the records of both counties at the cost of one.

In making reports on mineral and timber resources, and general examinations of the ground, my special arrangement with

county correspondents saves much of the cost of independent local examinations, and with many sections of the State I am personally familiar.

This office will also furnish county maps, attend to the payment of taxes, negotiate sales, make conveyances, collect rents, make surveys, correct erroneous assessments, and attend to any other matters incident or pertaining to the above.

Lists of all lands in each county in market, with prices asked, are filed here, and intending purchasers can thus learn of many opportunities for profitable investment which might otherwise escape them.

Correspondence is solicited, and all inquiries will be cheerfully answered.

Respectfully,

WALTER C. REDDY,

Expert Surveyor, Consulting Mining Engineer, and Examiner
of Titles.

P. O. Box 487,

Charleston, W. Va.

