THE

Chesapeake and Ohio

RAILROAD.

JANUARY, 1873.

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(Financial Agency of the Chesapeake & Ohio R. R. Co.)

NO. 5 NASSAU STREET,

NEW YORK, January 2d, 1873.

TO THE BONDHOLDERS:

EARLY in the present month the CHESAPEAKE AND OHIO RAILROAD will be completed and open for traffic from the wharves at its present eastern terminus, immediately below Richmond, to the head of continuous navigation, at Huntington, on the Ohio River.

In connection with this announcement, a brief Review of the character, advantages and prospects of the Chesapeake and Ohio Railroad will not be out of place, and cannot fail to be of interest to those to whom this communication is addressed.

The opening of this new East and West line of communication is an event of the highest importance, both to the populous States of the Atlantic seaboard and to the producing regions of the great West, and is destined to exert a marked influence upon the solution of the problem, so much discussed, of the cheaper transportation of Western products to the sea.

The great significance of a through line of railroad, leading directly from the best harbor and the most westerly indentation of deep water on the North Atlantic coast line, into the very heart of the Ohio and Mississippi Valleys, with their twelve thousand miles of connected and constant navigation, having grades lighter

than those between New York and Philadelphia, and with an abundance of cheap fuel along its route, must be apparent to those who produce, and those who trade in or consume the great staples of commerce.

The virtual monopoly hitherto enjoyed by the three or four lines of communication penetrating the West, has added to the cost of its products the highest rates for transportation which they could be made to bear, and limited the area and extent of production to a degree that has attracted the attention of all classes interested, more than almost any other question of our times. The closing of the lake navigation by storms and ice during four months of the year, and the limited capacity of the Erie Canal at its best, have hitherto left so large a surplus of produce subject to rail transportation over long distances, that high rates have inevitably followed, profits have been swept away, and production and shipment discouraged.

The means of transportation and distribution between the East and the West have not kept pace with the increase of population and production. The following, from a recent issue of the Chicago *Tribune*, forcibly illustrates how much the need of a new and efficient line of transport is felt at the West:

"It is becoming a serious question what is to be done with the "grain products of the country. During the last sixty days there has "been a general advance in the rates of freights all over the country, "and the effect is crushing upon those who produce the lower-priced "varieties of grain. This advance has not affected the wheat growers "so much, because there is comparatively very little wheat going for- "ward. This is, however, accidental. As an illustration, let us give "some figures. The cost of moving corn from a point one hundred "miles distant from Chicago, by way of the lakes and Erie Canal, "including the intermediate charges, to New York, is 41½c. This "does not include any charge or profit in that city. The price of "corn in New York is 65c. Allowing 3c. per bushel to cover profits "and expenses in New York, there is left to the producer just 21c. per "bushel for his corn. In oats the case is even worse. It costs to "deliver oats from a point like distant from Chicago, in the boat at "New York, 31c. per bushel. Oats are selling New York at 40@44c.

"If 2c. per bushel be allowed for expenses and profits in New York, "there is left to the producer 6c. to 10c. per bushel for his oats at the "place of growth. Of course, there is a limit beyond which wheat "corn and oats cannot be transported, except at a cost equaling or "exceeding the value of the article. The rate of freights on oats has "almost reached that point now. They may be still further advanced "until they prohibit the transportation of corn, and even of wheat. "The present freight charges to New York are nearly double the "average rates of last year, and the advance in freights is of necessity "taken from the price of the grain in the hands of the producer.

For years the residents along the banks of the Ohio and Mississippi and their numerous tributaries have been devising plans by which their cotton, breadstuffs, provisions, fruits, tobacco, hemp, and minerals, might be cheaply shipped to the American and European seaboard cities. The route *via* the Mississippi and Gulf of Mexico, besides involving such a loss of distance and time, is found to be attended with insuperable difficulties, and the demand for cheap freights has continued to increase, and to seek other outlets.

It has been estimated that the average cost of moving heavy freights on these inland streams is but three mills per ton per mile, while the average cost of the same class of freights by all rail lines can not be less than four or five times that of the water lines.

Nothing can be more certain, therefore, than that a line of railroad affording a short, economical and reliable portage between cheap river transportation, which is available at all seasons, and an Atlantic port favorable for distribution and shipment, will command a freighting business limited only by its capacity.

The Chesapeake and Ohio Railroad reaching the cheap navigation of these western streams at the head of navigation on the Kanawha River, (during the season in which this river is navigable), only 342 miles from tide water, and at the head of continuous navigation at low water on the Ohio River, only 420 miles from tide water, is the shortest portage between uninterrupted water carriage at the West and an Atlantic port: while it enjoys all

the conditions of economical, continuous and profitable operation.

At Huntington, its terminus on the Ohio, steamers and barges may at all seasons of the year transfer to the cars their cargoes brought direct from New Orleans, Shreveport, Yazoo, Memphis, Fort Smith, Tuscumbia, Nashville and Paducah in the southwest; from St. Paul, Fort Benton, Omaha, Leavenworth, Burlington, Quincy, Keokuk and Peoria in the northwest; and from St. Louis Cairo, Louisville, Cincinnati in the mid-west, and receive in return the fabrics and wares of Eastern manufactories and imported merchandise for transport to those points. Grain, live-stock, meats, and other products can be delivered at the river terminus of the Chesapeake and Ohio Railroad from the various points of the Mississippi River system, at less cost than it is possible to place freight from the same localities so far eastward by any other route, and from thence find the shortest and cheapest rail transportation to the seaboard, that can be reached by floating cargoes at all seasons.

All the more northerly routes by which the economy of water transportation can be secured to any considerable extent are available for only a portion of the year, during which they are always over-crowded. Water communication with the Western termini of the other roads reaching the Ohio River from the East is impracticable for several months in the year in consequence of low water, or ice, in the Upper Ohio. Communication with the open sea and coastwise navigation from their Eastern termini at Philadelphia and Baltimore are also frequently interrupted by ice.

The water communications at both ends of the Chesapeake and Ohio Railroad are comparatively constant and uninterrupted. The Chesapeake Bay is always free from ice, and the navigation of the Ohio River as low down as the terminus of this road is rarely obstructed.

The economy of this route for the transportation of Western products to Atlantic ports is therefore continuous and available throughout the year.

In addition to these advantages of a short and economical portage between continuous and unobstructed cheap water transportation, the Chesapeake and Ohio Railroad will soon have direct and low-grade all-rail connections with the principal produce and railroad centers of the West, and with the entire system of western railroad communication.

The ELIZABETHTOWN, LEXINGTON, and BIG SANDY RAILROAD, which will form the last link in the shortest and easiest line to and from Louisville, St. Louis, and the Southwest is already in operation under lease to the *Louisville, Cincinnati* and *Lexington* Company, from Lexington to Mount Sterling, 33 miles. The remainder of the distance, 85 miles, from Mount Sterling to a connection with the Chesapeake and Ohio, has been carefully surveyed and will be completed at an early day.

The SOUTHERN OHIO RAILROAD COMPANY, whose purpose is to complete the line from Dayton to the Ohio River, at a point opposite Huntington, so as to afford a short and favorable connection for the Northwestern cities over this route, have been prosecuting their surveys and improving their lines.

The CINCINNATI and CHESAPEAKE Railroad Company, have also made careful surveys of their line following the Valley of the Ohio, from Huntington via Portsmouth to Cincinnati, which establish the important fact that the road can be cheaply and rapidly constructed with grades *not exceeding* 15 *feet per mile throughout.*

The importance of this line, and the value of the connection which it will form with the Chesapeake and Ohio, are strongly appreciated at Cincinnati and throughout the populous and wealthy towns and counties along the route.

Another important result of the completion of the Chesapeake and Ohio Railroad, will be the very great stimulus it will impart to the COAL and IRON industries,

and the various branches of manufacture associated therewith, in the Ohio valley, and along its line in Virginia and West Virginia.

While the extension of the road to the Ohio river has been under construction, mining engineers and exploring agents of capitalists have been traversing the great iron ore belt of Virginia and the coal beds of the Kanawha and New rivers. Large tracts of valuable mineral lands have been purchased by practical miners and iron-workers from Europe, Pennsylvania and other States, as the result of these examinations.

The natural advantages and attractions for the investment of capital in coal mining extend for a hundred miles along the line of the road; and advantageous locations for iron furnaces, rolling mills, foundries, and iron works of various kinds, are found along almost the entire road. The time cannot be far distant when the various industries requiring cheap iron, coal, timber, water-power and cheap transit, will cluster along 300 miles of the Chesapeake and Ohio Railroad and create a local traffic which alone would render it one of the most valuable railroads in America.

Some of the most prosperous and profitable railroads in the country derive their revenues almost exclusively from the transportation of iron and coal; and those railroads which traverse prolific regions of iron and coal have been uniformly remunerative. The receipts of the Reading Railroad from the transportation of coal alone for the year ending Nov. 30, 1871, amounted to $8,287,-243.14.

We think it is no exaggeration to say that there is no railroad in the United States whose route is so rich in iron ores and coals as that of the Chesapeake and Ohio, or whose location is better calculated to command for these products the widest distribution to the best markets.

Prof. T. S. Ridgway, a mining engineer and geologist of repute, who has had more than thirty years' experience in the field, has made a full and careful examination of

the minerals of commerce along the line of the road. The concluding summary of his Report,* in relation to coal and iron ores, is as follows:

Magnitude of the Deposits.

"The lower coal measures, which I have just described in detail, "are comprised in twenty-four seams, eleven of which—containing an "*an aggregate thickness of fifty-one feet*—are workable. The pick and "shovel may disclose new beds in addition.

"Any attempt to estimate, by calculation, the amount of coal "contained within a given number of miles of your road would be "futile. Without deeming it necessary to resort to a trigonometrical "survey of even a small portion of the field, it is quite obvious, even "to the practiced miner, that there are above the water level, between "Big Sewell Mountain and Charleston, within five miles on either side "of the line on your road, thousands of millions of tons. The same "seams could, of course, be reached by pits of moderate depth, "between Charleston and Huntington; and the amount of coal avail- "able from West Virginia is incalculably large—sufficient, allowing for "a normal ratio of increase in consumption, to supply the Western "markets for a thousand years to come.

Advantages for Iron and Steel Manufacture.

"Reviewing the ground between a point in the Piedmont District "of Virginia, says Gordonsville, and the point where your line debou- "ches on the Ohio, Huntington, a distance of 325 miles, as traversed "by your road, I find an almost constant succession of the minerals "prominently used in the mechanic arts and commerce; and I am "convinced from the way in which they are presented at the surface, "from their abundance and variety, and from their proximity to, and "elevation above, the road, that all the elements of successful, con- "tinuous, and profitable coal mining and manufacture are here found "closely associated, and under the most favorable conditions for use. "The iron ores are especially rich, of great variety; the carboniferous "limestone is especially superior for fluxing purposes; the several "kinds of coal, are, in their several ways, specially adapted for the "manufacture, refining and working in iron and steel; and I am "decidedly of the opinion that both the crude metal, and its more "finished products, may be produced along this portion of your road "at less cost, or, in other words, so as to yield a larger profit, than in

* Copies of this Report, with Geological Map, may be had on application at the office of the Chesapeake & Ohio R. R. Co., 54 William Street, or at the Banking House of Fisk & Hatch, 5 Nassau Street, N. Y.

"even the most favored localities in other States. Having heretofore "investigated and reported upon various furnaces, and having in view "the cheapness of coal and charcoal, fuel, labor in Virginia (colored) "and the resources of water power, I am satisfied that pig iron can be "made at numerous points along the road at from $18 to $20 per "ton.

"The fact that good serviceable coal can be placed in your cars at "$1 per ton, exclusive of royalty, is one of the first importance, both "to the workers in iron, and to the immense distribution of coal for "various uses throughout the Mississippi Valley. It will be observed "also that, unlike most railroads, by the establishment of iron-works "between these extreme points, a reciprocity of freights would follow, "the cars passing one way loaded with coal, and the other with ores. "The light grades of your line will not only admit of this interchange, "but also enable you to distribute the minerals to the works along the "line at less cost, and also add to the net revenues of the Company. "Finally, there is no better outlet for coal and manufactured iron and "other products to the Mississippi Valley on the one hand, by means "of the 12,000 miles of internal navigation, added to the vast net-"work of railroads with which the Chesapeake and Ohio Stem Line is "destined to be connected; or, on the other hand, to the Seaboard "Cities by way of the cheap coast navigation which your line reaches at "its eastern terminus on the Chesapeake Bay."

To understand the value of these resources it is only necessary to glance at the growth of the Coal and Iron trade of the world and of the United States within the past few years.

Mr. Abram S. Hewitt in his very able and eloquent address before the American Institute of Mining Engineers, says:

"In 1856 I had occasion to trace the history of the manufacture of iron, "and established what may be termed its law of development, rather rude "indeed, but plainly dependent upon the growth of population and the spread "of civilization throughout the world. At that time the annual production "of iron had reached about 7,000,000 tons, of which Great Britain produced "3,500,000 tons, and the United States about 1,000,000 tons. The consumption "of Great Britain was 144 pounds, and of the United States, 84 pounds, while "the average consumption of the world was only 17 pounds, per head, of popu-"lation. It was shown that the consumption per head was steadily on the "increase, and that consequently the annual production was enlarging so "rapidly as to double once in 14 years; and it was predicted, after making due "allowances for all the drawbacks, such as the wars which have unhappily taken "place in the interval, beyond any possible expectation, that in 1875 the

" production of iron would surely reach 14,000,000 tons. The actual returns " show that in 1871 the production amounted to 13,500,000 tons, and in 1872 " the limit 14,000,000 will undoubtedly be passed, so that the estimate made " in 1856 is more than realized. Meanwhile the consumption has arisen in " England to 200 pounds, in the United States to 150 pounds, and in the whole " world to 30 pounds per head. It is not possible to convey a more striking " idea of the progress of the world, during the last 17 years, than this statement " affords. The consumption of iron measures the progress of civilization, and " it is impossible not to believe that the whole world will ultimately require as " much iron per head as we now use in the United States, when a total " annual production of over 70,000,000 tons will be required. But, if these " figures seem to be at all wild, no one can for a moment doubt that the next 17 " years will double the present annual production of iron, bringing it up to " 28,000,000 tons per annum; and I feel quite safe in asserting that the beginning " of the twentieth century, which some among you may hope to see, will witness " an annual production of over 40,000,000 tons.

" You need not be told that iron is produced at less money-cost in Great " Britain than any other quarter of the globe. This has enabled her to pro- " duce about one-half of the total annual make. Of the 7,000,000 tons made " in 1855, Great Britain produced 3,585,906 tons, and, of the 13,500,000 tons " produced last year, she turned out nearly 7,000,000 tons. It is evident how- " ever, that there are limits in the way of raw material and labor beyond " which Great Britain cannot go. While I see no reason to doubt that there " will be a steady increase in production, it is evident that she will not be able " to supply hereafter, as heretofore, so much as half the annual wants of the " world of iron. But, allowing this proportion to Great Britain, there will still " remain 14,000,000 tons to be made by the rest of the world. The history of " the trade, as well as the natural resources of the several nationalities, prove " that the bulk of this additional product can only be made in the United " States. We are, in fact, the only people who have kept pace with Great " Britain in the ratio of increase. In 1855, when Great Britain produced " 3,500,000 tons, we produced 1,000,000 tons. In 1872, when Great Britain " will produce 7,000,000, we produce 2,000,000 tons—the quantity produced in " Great Britain in 1847, showing that we are only 25 years in arrear of her " magnificant production. At the same rate, therefore, we could make 7,000,000 " tons in 1897. But, as Great Britain cannot possibly maintain her rate of " increase, there does not seem room for a doubt that our annual production " will reach at least 10,000,000, and will probably amount to 15,000,000 tons " before the close of the present century. This means that 25,000,000 to " 40,000,000 tons of iron ore shall be annually extracted from our mines, " and that our coal-production will exceed 100,000,000 tons per annum, re- " quired for iron and other branches of industry. It means that an invest- " ment of capital to the amount of $500,000,000 at least, and probably " $1,000,000,000, shall be made in opening mines, erecting works, and sup- " plying the requisite machinery of production."

The following figures will give an idea of the growth of Coal production and consumption in the United States:

The Anthracite Coal trade of Pennsylvania amounted in 1840, to 959,973 tons; in 1850, it had increased to 3,358,899 tons; in 1860, to 8,513,123 tons; and in 1870, to 15,849,899.

These figures cover a single variety of Coal and the Coal area of part of a single State only. The statistics of the production of Bituminous Coal would show an equal or greater ratio of increase.

It is safe to assume, in view of the rapid increase in the manufacture of iron and in the numerous other industries in which Coal is employed, and the constantly widening field of Coal consumption in place of wood, as the forests disappear, that the ratio of increase in the demand for Coal—especially for the bituminous varieties in which the route of the Chesapeake and Ohio Railroad abounds—will, in the next ten years, exceed enormously that of any previous period.

The recent remarkable advance in the prices of coal, iron, steel and allied manufactures, in the markets of Great Britain and Continental Europe, is giving a great impulse to the rapid development of coal mining and iron manufacture in this country, and especially on the line of the Chesapeake and Ohio Railroad.

Coal and pig-iron have risen from 50 to 150 per cent. in value in the principal markets of Great Britain. The limited coal-bearing territory of England is being probed and bored anew, and every device tried to satisfy the demand for coal and iron. The novel spectacle is seen of coal being imported from Belgium and Holland to the North of England; while iron ores have long been exported from Sweden, Norway, and Spain, to supply the deficiency of English mines. The cheap labor of England which has enabled her hitherto to supply so large a proportion of the iron consumption of the world, is itself disappearing; and the flow of labor and capital to America, combined with our natural advantages for these two important branches of industry, must render the United States the great iron and coal producing country of the future.

These facts add a new importance and value to our rich deposits of iron ore and coal, and to the lines of communication which open them to market. Already American coal is taking the place of the English article as fuel in several ports hitherto supplied exclusively with the latter. Orders have recently been transferred from Liverpool, England, for the supply of large quantities of bituminous coal from American ports, to be shipped to Madeira, Rio Janiero, Aspinwall, St. Thomas, Martinique, Havana, Valparaiso, and other distant points.

The bituminous coals of the Kanawha and New River Valleys are of superior quality for shipping and fuel purposes. These coals can be delivered over the light grades of the Chesapeake and Ohio Railroad, at low rates, and placed on board vessels at a point on deep water much more accessible, and 160 to 180 miles nearer the open sea, than those at which the Cumberland and Allegheny coals, with which the Eastern markets have hitherto been supplied, are delivered for shipment.

The Baltimore and Ohio Railroad delivered at its wharves and depots in Baltimore, during the past year, 1,500,000 tons of the Cumberland coal. The same amount delivered from the Kanawha and New River coal mines by the Chesapeake and Ohio at its seaboard terminus, would yield to the road upwards of $5,000,000 in freights; and it is believed this amount will be reached within two or three years.

Parties operating mines on the Kanawha and New Rivers have already made, and are making, contracts for the transportation of large amounts of coal over the Chesapeake and Ohio Railroad in both directions.

There will be a large demand for the Kanawha Cannel coal for gas purposes and for use in grates; and large quantities, already mined and sold to gas companies at the East, are awaiting transportation over the railroad for delivery on board vessels at Richmond. The price in New York of imported cannel coal, for several years past, has ranged from $14 to $18 per ton, at the wharves. This

whole supply may be drawn from the Kanawha mines at a large reduction in cost, which must lead to a greatly increased consumption; and there can be no doubt that a very large proportion of the cannel coal consumed on the Atlantic seaboard, hitherto mostly imported, will hereafter pay freight to the Chesapeake and Ohio Railroad.

The coal traffic to the West is also destined to be of great importance and value to the Chesapeake and Ohio Railroad. The common fuel of the Western prairies, and of the towns and cities of the Ohio and Mississippi Valleys, is bituminous coal. The manufactories of the West, of course, depend almost wholly on coal for their operation. They, in common with the whole lower Mississippi Valley, from the Ohio to the Gulf of Mexico, have hitherto been dependent upon coal shipped from the region near Pittsburg, subject to the risks, uncertainties and delays of the navigation above the terminus of the Chesapeake and Ohio Railroad. The quantity of coal from Pittsburg passing Huntington, in a single year, was 60,000,000 bushels, equal to 2,143,000 tons. The amount of coal received at Cincinnati during the past year is stated at 36,894,000 bushels, or over 1,300,000 tons.

It has been estimated by business men in Cincinnati, that not less than $3,000,000 per annum, on the basis of past consumption and the average cost for the past two years, would be saved to that city alone, by a continuous connection with the Kanawha coal fields.

As the bituminous coals of the Kanawha are equal in all respects, for use in the Ohio and Mississippi River markets, to those from Pittsburg, and as they can be delivered at Cincinnati and other river points at a less average cost, and with far greater certainty and regularity at all seasons of the year, it is reasonable to assume that in time a large proportion of the coal supply for these markets will be drawn from the line of the Chesapeake and Ohio Railroad, thus giving to the road a very large and profitable westward coal traffic.

Recent explorations more than confirm all that has hitherto been said of the variety, richness and abundance of the IRON ORES along the line of the Chesapeake and Ohio Railroad, and their superior quality and value for the purposes of commerce.

They consist of very rich brown hematites, magnetic, fossiliferous, argillaceous, specular and other varieties, required for the manufacture of superior qualities of iron and steel, which can be produced, as is shown by actual demonstration, upon the line of this road cheaper than anywhere else in the United States.

In the immediate vicinity of the Iron Ores there is an abundance of LIMESTONE suitable for iron manufacture, and the railroad will bring within easy reach the cheap and abundant coals of the New River and Kanawha, which are especially adapted for the use of iron furnaces.

These favorable conditions for the manufacture of iron have attracted increased attention during the past six months. Large tracts of iron ore lands have been taken up. Arrangements have been already made for the erection of several large furnaces on the line of the road; those previously in operation are preparing for renewed activity and enlarged production, and numerous other similar enterprises are in progress and under consideration.

These movements are but the beginning of what it is believed will, in a few years, render the line of the Chesapeake and Ohio Railroad the chief iron manufacturing district of the United States.

In connection with the Iron and Coal, the variety and abundance of TIMBER in close proximity to them becomes of great importance, and is attracting attention to the line of this road, as possessing unusual advantages for the various manufactures in which cheap iron, fuel and timber are essential, such as car building, the manufacture of agricultural implements, &c.

Arrangements have recently been made by parties possessing ample capital, for the erection at Huntington, the western terminus of the road, of a very extensive Car

Wheel establishment, which, judging from present indications, will be followed in quick succession by other manufacturing enterprises of equal magnitude and importance.

The rich and productive AGRICULTURAL LANDS of the Valleys of Virginia, offer great inducements to immigration and settlement, and are proving especially attractive to the class of English agriculturalists of considerable means who are seeking homes and landed estates in America, and to whom the soil and climate of Virginia are more inviting than those of the Far West.

During the past Summer, a considerable number of this class have purchased lands and settled in the vicinity of Staunton and Gordonsville, and the subject of emigration to and settlement in Virginia, is attracting so much attention and exciting so much interest in England, that arrangements have been made for a series of public meetings to be held during the coming winter, through the populous middle counties of that country, at which well-informed citizens of Virginia have been invited to present the information so eagerly desired on this subject. These English settlers all bring money enough to pay for their lands, and to improve and develop them to the highest state of productiveness.

The beauty, productiveness and salubrity of the "Valley" of Virginia, will, under the new order of things which the completion of the railroad is introducing, attract a large agricultural population, and furnish an important addition to the local traffic in agricultural products.

The present TRADE of the City of Richmond is of

far greater magnitude and importance, in its bearings upon the business of the Chesapeake and Ohio Railroad, than is generally supposed.

The Flour Mills of Richmond are probably the most extensive in the United States. The "*Haxall*" and "*Gallego*" brands have a world-wide reputation, and are considered superior to any other for shipment to South American and other tropical and semi-tropical ports, owing to the influence of the climate in which they are ground. The Richmond flouring mills have therefore long commanded those markets to the extent of their ability to supply them. Their receipts of wheat during the past few years have been entirely inadequate to the demand for their flour and to the capacity of the mills, leaving a yearly deficiency of over 3,000,000 bushels, equal to 90,000 tons, per annum, or 30 car loads per day. The additional amount required will be drawn from the West upon the opening of the Chesapeake and Ohio Railroad, and there is no doubt that when an ample supply of wheat can be relied upon at a reasonable cost for transportation, the flour business of Richmond will be largely increased.

The ships which take the flour of Richmond to South America and the West Indies, will bring back to that port return cargoes of coffee and sugar, with which the Western markets can be supplied, to a considerable extent, by importation at Richmond and transportation over the Chesapeake and Ohio Railroad, at less cost and in better condition than through any other channel.

Probably one-half at least of the coffee imported into the United States, which amounted in 1871 to 322,000,000 pounds, is consumed west of the Alleghanies. When the coffee ships, waiting orders at Hampton Roads, can place their cargoes on board cars there, or at the Richmond Docks, for transportation westward, it is believed that a large proportion of the coffee required for the West-

ern markets will find its way over the Chesapeake and Ohio Railroad.

The water power of Richmond is among the finest in the country, and its manufactures of iron, heavy machinery, agricultural implements, &c., are gaining an extended reputation. The celebrated Tredegar Iron Works are already competing successfully with the best establishments elsewhere in the manufacture of cars, car-wheels, bridge-iron, heavy castings, &c., for the West, with the cost of transportation heretofore greatly against them. With the opening of the Chesapeake & Ohio Railroad their facilities for supplying the Western railroads and markets with their products will be unsurpassed, and they will send an immense tonnage over the Road.

Richmond will also have a large trade in Western corn, oats and bacon for neighboring markets, and for North and South Carolina and coastwise consumption.

Richmond at the East and Louisville at the West are the leading TOBACCO MARKETS of this country. There are now at Richmond between 50 and 60 tobacco manufacturing establishments, in which about 5,000 hands are employed. A large proportion of the tobacco of Virginia, Kentucky, Tennessee and Missouri, will hereafter seek this market over the Chesapeake and Ohio Railroad for manufacture or shipment.

From the foregoing, it is apparent that the present trade of Richmond will ensure a large tonnage to the Railroad, without reference to the great increase in her domestic and export trade, and in her manufactures, which the completion of the Railroad, and direct communication with the West, is certain to create.

The celebrated *White Sulphur Springs*, one of the most beautiful and attractive watering places in the country, together with the *Old Sweet*, *Warm*, *Rockbridge Alum*, and other widely known MEDICINAL SPRINGS of the Alleghanies, have during the past Sum-

mer attracted a great increase of pleasure travel, though they have as yet been accessible by rail from the Eastward only. With the opening of the road through to the West, there will be an enormous increase of this travel, as these springs will be the favorite and most accessible watering-places and Summer resorts for the people of the entire West and Southwest.

This brief review of the advantages of the Chesapeake and Ohio Railroad, the investigations and researches of the past year, and the movements of capital and enterprise in the direction of the various industries for which the line of the road is so remarkably adapted, during the last few months, warrant the belief that the development of its business will be more immediate and rapid, and of greater magnitude than we have hitherto ventured to predict.

For the year ending Sept. 30th, 1872, the earnings of its disconnected portions, without mineral or through business, and with the rolling stock and motive power of the road, and the energies of the Company almost entirely devoted to the work of construction, were about $850,000 and steadily increasing, reaching in the month of August $114,000, or at the rate of nearly $1,400,000 per annum.

These indications as to the immediate business and requirements of the Road have led to a larger outlay than was at first contemplated, before its opening for business, the Directors being convinced that the necessary additional expenditure for thorough and permanent work and enlarged equipment, made now, must yield a large return in the early future of the Road.

Permanent embankments, masonry of the most substantial character, and the best Iron Bridges known to

engineering skill have been adopted instead of trestle-work and wooden structures; Steel instead of Iron rails have been laid upon a portion of the route, where the demand upon the endurance of the track would be the heaviest, and the contracts and orders for Locomotives, Coal cars and other equipment have been increased. The following will show the motive power and rolling stock with which the through line will begin business:

Locomotives	63
Passenger Cars	33
Baggage, Mail and Express Cars	22
Box, Stock, and other Freight Cars	600
Coal and Mineral Cars	490

The Company have constructed a Tunnel under Church Hill, from their present Depot at Richmond to the Docks, toward the cost of which the City of Richmond voted $300,000 besides granting to them free of cost the right of way along the entire water front of the city, which is of great value.

To meet these enlarged views and improved plans, and to fully prepare and equip the road for the business awaiting it, the Company have issued $5,000,000 in SEVEN PER CENT BONDS, payable in twenty years, from July 1st, 1872, or redeemable at the option of the Company after five years, and convertible into any Mortgage Bonds, which they may hereafter issue. Interest payable semi-annually on the first days of January and July. Principal and interest payable in gold in the City of New York.

These bonds have all been sold, and the proceeds of the issue are sufficient to fully complete and liberally equip the main line from Richmond to the Ohio River and leave the Company free from floating debt.

The CHESAPEAKE and OHIO RAILROAD occupying the middle belt of temperature of the United States, comparatively free from the extremes of heat and cold, will have

its Eastern terminus on the central and most commodious harbor of the Atlantic Coast, where navigation is never obstructed by ice, and where the largest vessels in the world can lie directly alongside its track; and its Western terminus on the Ohio River, at a point from whence transportation by water is more continuous and unobstructed throughout the year, than from any other point reached by rail from the East.

A bridge spanning the Ohio River at this latter point will connect it with all the great railroad lines of the West and Northwest; and it will have a nearly air-line conection, via Lexington and Louisville, with St. Louis, and the Pacific Railroads.

For a great portion of the Southwest it will be the most direct and economical route for passengers and freight to the great markets of the Atlantic Coast and Europe.

Its route is lined with iron ores and coals, unequaled in variety, quantity, quality and accessibility, by those of any equal area in the world, the beautiful and productive valleys of Virginia, immense virgin forests of valuable and marketable timber, salt wells, mineral springs and a profusion of almost all the natural resources with which a region of country can be enriched.

With these striking features, and the advantages which it possesses over other East and West through lines, in its low grades, slight curves and the economy with which it can be operated and maintained, it cannot fail to attract the attention and excite the interest of every intelligent man who notes its position and traces its course on the map, and to afford the profoundest satisfaction to every capitalist and investor who has any direct interest in the Railroad itself, or in the resources and industries to which its completion is imparting so wonderful and rapid a development.

This magnificent work, which has for years been steadily cutting its way through the Blue Ridge and the Alleghanies, and upon the western half of which, the labor of over 5,000 men has been employed during the

past three years, is now substantially completed at a cost of over $35,000,000.

We believe it is not too much to predict that within a very few years it will become one of the greatest thoroughfares in America; with a large and populous manufacturing city at Huntington, its Western terminus; with the city of Richmond taking its place among the leading manufacturing and commercial cities of the East; with its deep-water terminus on the Chesapeake Bay, one of the principal points for the shipment of American products to foreign ports and their distribution along the Atlantic Coast; with lines of Ocean Steamers connecting it direct with the chief commercial ports of Europe; with iron furnaces and coal mines thronging its route and crowding it with their products, and exhibiting a growth and development of business which has not been excelled by that of any of the great highways of commerce in the history of the country.

FISK & HATCH,

Financial Agents Chesapeake & Ohio R. R. Co.

HARVEY FISK. A. S. HATCH.

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We deal in GOVERNMENT BONDS, and in the following FIRST-CLASS RAILROAD SECURITIES, which we can recommend with confidence, from a thorough knowledge of their character and value, viz.:

CHESAPEAKE AND OHIO BONDS, 6 per cent. Gold. Denominations $100, $500, $1,000. Coupon or registered. Interest May and November.

CENTRAL PACIFIC BONDS, 6 per cent. Gold. Denomination $1,000. Coupon. Interest January and July.

WESTERN PACIFIC BONDS, 6 per cent. Gold. Denomination $1,000. Coupon. Interest January and July.

Full information furnished upon application at our office, in person or by mail.

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