

GUNNISON CITY

The Future Metropolis  
of the  
Western Slope

W.H.  
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# GUNNISON CITY.

THE FUTURE

METROPOLIS OF THE WESTERN SLOPE.

*Its wonderful growth, and its advantages as a Smelting, Manufacturing and Distributing Point.*

PUBLISHED BY THE BOARD OF TRADE OF GUNNISON CITY.

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The present population of the city is estimated by good judges at from five to six thousand, and the exact figure is probably about midway between those two extremes, or say, 5,500.

Gunnison has a municipal organization composed of a Mayor, Board of four Trustees, Recorder and Treasurer. There is also a Town Attorney, Town Physician, Marshal and an efficient police force.

By actual count, there were 161 business houses of all kinds in Gunnison in February last, and, taking the number of new firms that have since started, it would be safe to say that the total now is somewhere between 175 and 200. There are two banks now doing business, the First National and the Bank of Gunnison, and another national bank, called the Citizens', has been partly organized.

#### NEWSPAPERS, CHURCHES AND SCHOOLS.

The town has one morning daily newspaper, the *News-Democrat*, and one evening daily, the *Review-Press*. It has seven church organizations, viz.: Baptist, Methodist, Catholic, Presbyterian, Episcopalian, Congregational and Christian. The first four have neat frame churches completed, and the Episcopalians are now erecting a very handsome stone chapel. The town has one good brick school house, a two story structure, costing fully \$10,000, and is now erecting two more at a cost of \$24,000, the bonds for the building of which have just been disposed of to Eastern capitalists at par.

Business lots range from one to five thousand dollars, choice corners being held at the latter figure. There have been some sold this season, the last one reported an inside lot, bringing \$3,500 cash.

Residence lots are selling for from one to five hundred dollars.

Fully 150 buildings have been erected this season within the town of Gunnison. Many of these are of a most substantial character. The list includes a \$100,000 hotel, stone gas building and water building costing \$6,000 each, a stone business block costing about the same, a \$10,000 bank building and several brick business blocks, besides quite a number of two story frame business buildings and many handsome residences.

Gunnison is located on a plain, sloping gently to the south and west, and is most admirably situated for the building up of a city of easy grade.

#### ITS PUBLIC ENTERPRISES.

Among the public enterprises may be mentioned a complete telephone system with over 70 instruments now in use. In connection with this is a police and fire system of great benefit to the town. The principal streets are all supplied with water ditches. A system of gas and water works are now in operation which cost nearly a quarter of a million dollars. Three miles of gas and water pipe have been laid and the water works started up in June, and the gas works will be ready by the middle of August. A street car company has been organized, a charter obtained and the work of construction will begin soon. At present a public hack line serves the purpose of carrying passengers about the city. A half-mile race track has been built near the city.

The main line of the Denver & Rio Grande railroad, from Denver through to Salt Lake City, reached Gunnison in August, 1881, and a branch was built from there to Crested Butte, twenty-eight miles north. The South Park branch of the Union Pacific is also graded to Gunnison and on through to Ruby Camp. The latest advices regarding the building of this road are to the effect that the road

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will be completed to Gunnison by August 25th, and to the South Park coal banks at Mount Carbon two months later.

## ITS RESOURCES.

Gunnison relies for its future growth and prosperity upon its position as a central point for smelters, blast furnaces and iron manufactories of various kinds, and also as a distributing point for a very rich mineral, agricultural and grazing country. It is the central point and gateway to, and is easily approachable from the mining camps of Tomichi, White Pine, Ohio City, Pitkin, Tin Cup, Ashcroft, Aspen, Scofield, Elko, Sheep Mountain, Gothic, Treasury Mountain, Slate River, O-Be-Joyful Gulch, Poverty Gulch, Ruby, Cochetopa, Ouray, Lake City, San Miguel and numerous other camps. In fact, it is completely surrounded by one of the richest mining countries in the world, and can be approached by an easy down grade from almost every direction. It also commands the wonderfully rich deposits of anthracite, bituminous and coking coal in and about Crested Butte, and on Slate River, Rock Creek, Anthracite Creek, Mount Carbon, Castle Mountain, and the anthracite beds west of Ruby. Thirty-five miles to the southwest of Gunnison, and easily approachable from there, is found an inexhaustible supply of rich iron ore of the best quality for manufacturing purposes. This Cebolla iron ore has been repeatedly tested, and is known to equal, if not surpass anything found in any part of the United States. This territory is now principally held by wealthy iron manufacturers of Pittsburg and St. Louis, who propose to erect extensive iron works in Gunnison at no distant day. The proximity of both coal and iron gives Gunnison peculiar advantages as a manufacturing point, so much so that one of the leading iron men of St. Louis, after thoroughly investigating the subject, said that he would be willing to guarantee

books drawn on his care and for an amount accruing on the same.

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that within five years Gunnison would be shipping iron to St. Louis and the east. A foundry and machine shop has already been built, and is now in successful operation.

## AS A HEALTH RESORT.

Gunnison is considered a healthy place, in fact remarkably so. The air is dry, clear and bracing, and the climate, excepting the wind and dust in the middle of the day during the spring months, could not well be improved upon. The winter climate is simply delightful. The thermometer often goes below zero, but the air is so dry and still, that the cold is not felt, and people there suffer less at twenty degrees below zero than they would in the east at ten to twenty above. But little snow falls in the valley around Gunnison. During the past winter the snow was never more than a foot deep, and for a great part of the time it was not more than from three to six inches.

The water courses in the neighborhood of Gunnison, are the Gunnison River, flowing from the north and passing just west of the city, and the Tomichi River coming from the east and joining the Gunnison a mile or two below town. The Tomichi has a fall of not over ten feet to the mile, while the Gunnison falls at least thirty-five or forty feet in the same distance. The latter stream has quite a volume of water, and with its fall could be made to furnish all the power required for manufacturing purposes.

## BUILDING, MONEY AND FUEL.

In the way of building material Gunnison is well supplied. Within from half a mile to two miles from town are found inexhaustible quantities of a very superior quality of gray, brown and white sandstone, which makes an excellent building stone. An abundance of

good pine timber is found within twelve to fifteen miles of town, and no less than ten saw mills now contribute to that market, besides the lumber, manufactured and otherwise, that is brought there from the east. The town has three planing mills, one of them the largest in the State. These mills are kept constantly busy turning out building material. The average price for lumber is about twenty dollars per 1,000 feet. Four brick yards are now in full blast near the city, and are turning out brick at the rate of 40,000 a day.

Money commands from  $1\frac{1}{2}$  to  $2\frac{1}{2}$  per cent. per month interest, and can be readily loaned on good security at the former figure. The banks charge 2 per cent. a month, and are doing a rushing business.

Coal is the principal fuel, and is found in inexhaustible quantities at and near Mount Carbon, from fifteen to twenty miles from town, and at Crested Butte, thirty miles north of town. At present coal is dear, costing from seven to nine dollars per ton; but as soon as the South Park road is completed to the coal banks there will necessarily be competition between it and the Denver & Rio Grande, and this competition will bring the price of coal down to a fair figure.

#### GUNNISON AS A SMELTING POINT.

What advantages has Gunnison as a smelting point, and could it support a really first class smelter and refining works if they were erected there? To the average resident the above question needs no answer. He knows already, for he has studied the subject and has had it dinned into his ears until he knows every point in Gunnison's favor. Unfortunately, the men who know most of Gunnison's advantages are the men who cannot use them. The erection of a smelter and refining works, for

instance, costs money, and plenty of it, and the people of new Colorado lack the means to put their knowledge to any practical advantage.

The people of this part of the State, are, as a rule poor, or if not exactly poor, at least in only moderate circumstances. Indeed, it would be strange if it were otherwise. The country is very new yet. Little was ever heard of it before the summer of 1879, and the men who came were almost invariably poor men, men without a dollar. That hundreds, even thousands of these men are now in comfortable circumstances, speaks volumes for their courage, thrift and industry, as well as for the wonderful resources of the country to which they came.

#### THE FIRST QUESTION THAT CAPITAL ASKS.

Now that that same matter of fact capital is convinced that there is really something in the Gunnison country, its representatives are rushing in as the poor prospectors did a few years ago. Many of them come from the far eastern part of the United States, and even from across the Atlantic, eager to see that country, the story of whose wealth has gone abroad. They come with money and with a general knowledge of the resources of this region, but they want details, they want facts.

Speak to them of the mines and they say: "Oh yes, I have heard you have the precious metals here, but where are they? In what part of the country do you find these mines, and what do they produce? Are they accessible, and what is the character of the ores?"

Speak to the capitalist of the coal and the iron and the same flood of questions will be the result. He has heard of these things and he wants to know all about them. He comes here with money to invest, but he must know all the inside facts first. Tell him that Gunnison is a

natural smelting point for this part of the State and he will immediately ask: "Why is it? What makes it so?"

The object of this pamphlet is to answer these questions. The information given may seem like an oft-told tale to those who live in Gunnison, but the information is not for them, but for the stranger who comes seeking investment and knowing little or nothing of the country lying all about him. In giving this information the writer will try to give facts, and will be inclined to under, rather than over estimate. What the Gunnison country will be in one, two or ten years, or what the city of Gunnison may be in that time is only conjecture; what they are to-day this little book will attempt to point out.

#### GUNNISON'S NATURAL ADVANTAGES.

In speaking of Gunnison as a good point for refining and smelting works and blast furnaces, the average citizen of that place will say, "It is a good point, the best in the country. And why should it not be? It has everything in its favor. It is surrounded on every side by rich mining camps, which are tributary to it, and can be reached over easy down grades. It has the coal, iron and lime easily accessible. Here can be brought together the proper combination of ores for successful fluxing and smelting—the wet ores from one camp, the dry ores from another."

"That may all be very true," answers the capitalist, "but suppose a large refining works and smelter were erected in Gunnison to-morrow, a large one such as Grant's works were in Leadville, would the ore be forthcoming to keep it busy?"

To answer that question the writer recently visited nearly every camp in the county in search of trustworthy information. The best posted and most reliable men in each were questioned, and in every case an effort was

made to get all estimates so low as to eliminate the element of chance. The people of many districts, for instance, claim that within ninety days, with a good ore market and good roads, they could turn out ore enough to keep several large smelters in operation.

#### GUNNISON'S SITUATION.

The city of Gunnison, is situated on a level plain, sloping gently to the south, near the junction of the Gunnison and Tomichi rivers. The Gunnison, which flows west of the city, comes from the north, and, with its branches, drains the rich mining fields of Tin Cup, Irwin, Ruby, Taylor River, Poverty Gulch, Gothic, Crested Butte, Spring Creek, O-Be-Joyful, Slate River, Elko, Seofield, Sheep Mountain, Silver Basin, Dark Canon, Washington Gulch, Rock Creek, Brush Creek and other camps lying to the north. The Tomichi, which joins the Gunnison a mile or two southwest of town, comes from the east and drains the equally rich camps of Tomichi, White Pine, Pitkin, Quartz Creek and Ohio City. The anthracite coal fields are found on Slate River, near Crested Butte, on Anthracite Creek, near Ruby, and west of Irwin at various points in the Reservation. The wonderful coking coal, which readily cokes in the open air, is found just south of and within the corporate limits of the town of Crested Butte. Fine bodies of bituminous coal are also found on Ohio Creek and at Mount Carbon, but sixteen to twenty miles north of Gunnison. The wonderful and inexhaustible beds of iron ore of the Cebolla are situated on the stream of that name, which is a tributary of the Gunnison, about thirty miles to the southwest. Gunnison already has one railroad, the Denver & Rio Grande, and within a few days will have another, the South Park, which is now finished nearly to Ohio City. It has a population of over 5,000; schools, churches, graded streets, gas and water,

the telephone and nearly all the modern improvements of a city.

#### THE TOMICHI DISTRICT.

Of the mining camps tributary to it the first to be described is the Tomichi District. This includes the camps of Tomichi and White Pine, which are situated but two miles apart, on the head waters of the Tomichi River. The district lies nearly due east from Gunnison, and about forty-two miles distant as the road goes. The nearest railroad point at present is Sargent's, on the Denver & Rio Grande, twenty-eight miles east of Gunnison. From there a good wagon road leads up the valley of the Tomichi in a northerly direction twelve miles to White Pine, and two miles beyond to Tomichi. Both towns are small, containing not over three or four hundred people each, but the mountains and gulches in every direction are dotted with miners' cabins. The altitude of the camps is 10,200 feet, and of the mines from 300 to 800 feet higher.

The district contains mines producing almost every known kind of silver ores, from wire silver and sulphurets to galena and genuine sand carbonates. The lead ores are found mostly on the east side of the district, while on the west side the veins carry the richer ores, such as native, wire and brittle silver and sulphurets.

Among the best developed and best known mines of the district are the North Star group, Alwilda, Lloyd's tunnel and the Chicago, near White Pine, and the Montgomery, Defiance, Twin Lakes, Lewiston, Katy Quinn, Sleeping Pet, Mammoth, Little Winnie, Gypsey, Contact, Bill Short and Twin Lakes. Of these the Lewiston, Pet, Bill Short, Montgomery, Defiance, Gypsey, Fort Scott, North Star and Twin Lakes have actually shipped ore, hauling it on wagons or sleighs to Sargent's, and from there shipping by rail to Denver, Pueblo and Maysville.

The ore of the Lewiston and Pet is very rich, running 1,500, 700 and 250 ounces in silver to the ton for first, second and third grades.

#### A GUARANTEE OF ORE.

The North Star property has large quantities of galena and carbonates, which average forty ounces in silver and fifty per cent. lead. The owners say that, in case of a good market, they are willing to guarantee to furnish twenty tons of ore per day for one year. The ore contains no zinc or antimony or any other element that would be considered refractory. The Montgomery, Defiance and Bill Short mines also have large veins of lead, sulphurets and gray copper. They are all situated in Robbins Gulch, and could in a very short time be made to produce forty tons of ore per day, that would average forty per cent. lead and fifty ounces in silver to the ton. The best posted and most reliable men in the camp say that with a smelter and a good ore market in Gunnison there would be no difficulty in bringing the output up to 500 tons per week within sixty days. A 100-ton concentrator is now in course of construction and will be in operation early in September. The owners, who are also the owners of the Montgomery mines, expect to be taking out forty tons of ore per day by the time the mill is ready to start up. It will cost on an average five dollars per ton for hauling the ores to the railroad at Sargent's. The County Commissioners are now putting a road up to the head of the Tomichi, and over the divide into the valley of Quartz Creek. When this new road is finished it will place the district within five miles of the South Park road at Woodstock.

The output that might confidently be expected from this district per week with a good ore market, may be stated as follows:

North Star group . . . . .	140 tons.
Robbins Gulch and Clover Mountain . . . . .	200 "
Alwilda . . . . .	100 "
Lewiston and Pet . . . . .	10 "
Others . . . . .	50 "
Total . . . . .	500 tons.

## THE QUARTZ CREEK DISTRICT.

The Quartz Creek District is one of the richest in the State, but owing to the fact that it was away from a railroad, away from a smelter or ore market, and away from everything which tends to develop a camp, but little has been done. The mines have been worked after a fashion and until this season no really systematic development and ore output have been attempted. Still with all these drawbacks the actual output of ore has been by no means small. A careful calculation from seventeen of the principal mines of the district recently gave the amount of ore on the dumps at 2,825 tons. Of this the Fairview and Islet were credited with 1,000 tons each, the Terrible and Brittle Silver with 200 tons each, and the others with from five tons upward.

The seventeen mines mentioned are now nearly all being worked. The forces are small, however, not averaging over four men to each, and no effort is being made to turn out ore, the work being entirely for purposes of development. The ore is generally lead or galena, though considerable gray copper, sulphurets and other ores are found. It is rather high grade and will average from 50 to 100 ounces to the ton. The wonderful Silent Friend group, discovered this spring, is alone sufficient to make the reputation of the district.

On present development the camp could produce 200 tons per week, and with a railroad and an ore market it

would not be difficult to treble or even quadruple that amount. Before a smelter can be built the South Park road (now finished to Pitkin) will have been completed to Gunnison. This railroad will follow the valley of Quartz Creek, thus making all the mines easily accessible. The distance to Gunnison is about twenty-eight miles, and the railroad is now certain of being finished within thirty days at the utmost.

The Quartz Creek district is not only rich in silver but in gold as well. In the southern part of the district, near Ohio City, is a strip of country, known as the Gold Belt, containing many veins of free milling gold ore. But little was heard of this region until the present season, but it is now having a boom almost unprecedented in the history of Gunnison county. Three stamp mills are already in successful operation, and as many more will be erected before fall. The district now has a steady output and promises to become one of the richest gold fields in the State. This is the most prominent gold camp in the county.

Cochetopa lying southwest of Gunnison has many promising claims, but they are not sufficiently developed to test their actual value. Some exceedingly rich gold discoveries have been made within the past month or two near enough to Gunnison to become directly tributary to that place, but their exact location has so far been kept secret except to a very few. Some of the specimens shown are marvelously rich.

## THE TIN CUP DISTRICT.

The Tin Cup District deserves to be called the banner camp of the Gunnison country, both on account of the richness and extent of its mineral deposits, and on account of the fact that up to the present time it has furnished, perhaps, four-fifths of the entire ore output of the

county. The ore is generally found in lime formation, and but little trouble is experienced from water at any season of the year.

The camp is situated northeast of Gunnison, distant about forty miles. Its greatest drawback so far has been its inaccessibility. The district has already marketed fully half a million dollars worth of ore, and all of this has had to be packed on jacks across a high mountain range to St. Elmo. Of course, the ore must be very rich to stand such handling and still pay a profit. At present there is a very fair wagon road through Taylor Park and down Taylor Canon to Fisher's, a station on the Crested Butte branch of the Denver & Rio Grande railroad, ten miles north of Gunnison.

A shorter and better road to connect with the railroad is now in course of construction, however, and will be finished by the middle of August. This is a wagon road from Gold Hill directly south over the divide to connect with the South Park at the Horseshoe on Quartz Creek. The completion of this road will place nearly all the best mines of the camp within eight miles of a railroad leading to Gunnison.

What the camp needs, however, and what it must have before its mines are worked to the best advantage, is direct railroad communication. This can easily and cheaply be attained by building a branch of the Rio Grande up Taylor River from Fisher's. Such a road could be built at small expense as there is a water grade all the way. There is a strong probability that it will be built.

The altitude of the town of Tin Cup is 9,600 feet, and of the mines 10,500 feet. A very large majority of the best mines lie in close proximity to each other on Gold Hill and Anna Mountain. Fourteen of the mines in these two localities have taken out ore varying in quan-

tity from five hundred dollars' worth to four hundred thousand dollars' worth. The total ore product of the camp to date has been something over five hundred and fifty thousand dollars.

#### CANNOT BE SMELTED ALONE.

The ores are generally silicious and do not contain lead enough for successful smelting by themselves. A twenty-five ton smelter has been erected in the district, but has done little or nothing so far, owing to the trouble of getting lead ores to use as flux. There are fully 5,000 tons of marketable ore, that is, ore rich enough to bear transportation to Gunnison for treatment, now on the dumps.

Fifty tons per day would be a low estimate of the present possible output of the camp, and within sixty days this could be doubled. With a railroad to the camp and a good ore market in Gunnison, the output could be increased to almost any desired figure, for, besides the fourteen mines that have already produced, fully thirty more could be added to the list within a very short time. The ore of the camp all runs more or less in lead, but not enough for smelting purposes, with the exception of a few claims. The silver is generally found in the form of chlorides, bromides, sulphides, brittle silver, gray copper and sulphurets, with occasional veins of galena, copper, iron and lead carbonates. The silicious ores generally run from fifty to sixty per cent. silica, two to three per cent. calcium, two per cent. manganese, four per cent. iron, and the remainder alumina and magnesium, and with only a trace of zinc, antimony or arsenic. On further development it may be found that the district contains enough lead to smelt its own ores, but that is not now the case.

## SOME BIG FIGURES.

Of the average value of the ores it may be said that the Gold Cup and Tin Cup, by far the heaviest producers of the camp, have given returns as follows: First-class, 348 ounces silver and 3 ounces gold; second-class, 178 ounces silver and 1½ ounces gold; third-class, 123 ounces silver and 1 ounce gold. The Anna Dedricka and May Flower run nearly as high, besides averaging from 20 to 30 per cent. in lead. The Iron Bonnet and El Capitan ore unassorted, runs \$146 in silver to the ton, while the general average of the Drew ore, assorted, is 135 ounces. The Jimmy Mack averages 114 ounces for first-class and 70 for second. The Emma runs 120 ounces, and 70 ounces respectively, and sixty per cent. lead.

Besides these rich mines there are dozens of others averaging from ten to 100 ounces in silver, and running well in iron, lead and copper.

The Carbonate King and Carbonate Queen, for instance, show large quantities of iron carbonates running high in iron and low in silver, the average of the latter not being over from ten to twenty ounces to the ton. The advantages of a concentrator in handling such ores cannot be overestimated.

A careful computation gives the actual output of the camp to date at \$556,000, at an average cost of fifty dollars a ton, as every pound of it had to be either hauled in wagons or packed on jacks eighteen miles over the range to the railroad. Only the richest ore could stand such charges, and the fact that the camp could make so good a showing under such circumstances speaks volumes in its favor.

## THE ELK MOUNTAIN DISTRICT.

This district not only includes Gothic, but Brush Creek, Copper Creek, Rock Creek, Rustler Gulch and

Sheep, Treasury and Galena mountains as well. It is situated due north of Gunnison, distant from forty to forty-five miles. Gothic is the principal town, and has an altitude of 9,500 feet. The mines vary from ten to twelve thousand feet. Like every other camp in the Gunnison country, the absence of railroads or even of good wagon roads has been a serious drawback to its development. The Denver & Rio Grande has now reached Crested Butte, however, which is but eight miles from Gothic and connected with it by an excellent road. From Gothic roads are now being laid out and will soon be built which will connect with Elko, Scofield, and nearly all the other mining camps of the district.

The absence of roads has been a serious drawback to the ore output, and it would be safe to say that not over ten carloads have been shipped up to the present time. The cost of hauling this ore to the railroad has averaged at least ten dollars per ton.

Among the actual producing mines of the camp may be mentioned the Sylvanite, Virginus, Hancock, Luona, Bullion, Grand Republic, Milwaukee, Buffalo, Eureka and others. The number of claims that, with roads and an ore market, could be made producing, is very large, though in many of them the grade of ore is rather too low to stand excessive shipping charges. It would be safe to say that sixty per cent. of the ores of the district are galena, which will average from thirty to forty per cent. in lead. The district could now easily turn out 100 tons of ore per week, which would average thirty ounces in silver, fifteen per cent. lead and seven to fifteen per cent. copper. What is needed in the district is concentration works to handle these low grade ores and put them in shape for shipment. A large concentrator is now going up on Rock Creek at Elko, built by the Central Mining and Milling Company, and there is room for several more. With such works in operation the dis-

trict could easily turn out 500 tons of ore per week. Without them the output is bound to be small, as only the high grade mines can afford to ship their ores as taken out.

#### THE ASHCROFT AND ASPEN DISTRICTS.

As tributary to Gunnison, though lying largely in another county, some description of these districts will not be out of place in this pamphlet. The Ashcroft mines are located on the crest of the Elk Mountain range, about forty-three miles north of Gunnison, in the vicinity of the dividing line between Gunnison and Pitkin counties. On the completion of the free wagon road which has recently been begun, the ores of this district will have a natural outlet down the mountain via Brush Creek, to the Denver & Rio Grande Railway at Crested Butte, a distance of fifteen miles, thence by rail to Gunnison. It is estimated that the cost of transportation from the mines to Gunnison will not exceed twelve dollars per ton.

The altitude of the district is about 11,000 feet. This would seem at first glance to be a great drawback, but as a matter of fact it is most advantageous. The mines are located above timber line, and the mountains are so abrupt that the slide and wash passes on down into the valleys, leaving the veins exposed and well defined. A very little development work, intelligently directed, is sufficient to prove up the property. This advantage can only be appreciated by those who have spent fortunes in sinking through hundreds of feet of wash and debris to find the vein, which, when found, often proves worthless.

The mineral belt reaches its widest part at Ashcroft. Prof. Hayden states that it is ten miles wide at that point. Prospecting and development work has been going on for the past three years, and steadily increasing all the time.

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It is a well known fact that it is difficult to get Leadville men interested in a new district. They contrast everything with their own magic camp, greatly to the detriment of the new aspirant for honors.

But it was Leadville enterprise and capital that brought Ashcroft into its present prosperous condition. The Ashcroft veins are as extraordinary in fissure mining as the Leadville ore bodies are in deposit mining. The veins on Slate and Castle mountain are from three feet to fifteen feet in width, carrying galena, gray copper and sulphurets, milling from 75 to 150 ounces in silver per ton, and fifteen to sixty per cent. in lead, which forms an excellent smelting ore.

The Pearl Mountain veins carry silver glance and brittle silver in large quantities, assaying from 500 to 5,000 ounces in silver per ton. Eleven tons of this ore netted the owners of the Pearl, \$9,000. Twenty-four samples selected from the croppings of the Aleyon assayed from 287 to 11,163 ounces, making an average of over \$3,000 per ton. One hundred tons shipped from the Tam O'Shanter group netted Governor Tabor \$86.50 per ton. And there are scores of other properties in the district fully as rich as the famous Tam, but they are not so well known on the outside, because Tabor's name is not connected with them.

The Philadelphia Mining company, composed of Philadelphia Quaker bankers, are working ten properties and are only awaiting transportation to begin ore shipments. The Pearl Mining company, eastern capitalists, are also ready to ship large quantities of ore.

The owners of the Castle Peak mines are English capitalists. They mean business, and will soon put a large number of men at work.

The Paradox group will soon pass into stronger hands and produce steadily.

The managers of the Tam O'Shanter are now negotiating for the shipment of 100 tons of ore daily, if transportation can be secured.

Wall & Witter, of Denver, have 160 mules to put on a freight line between Ashcroft and Crested Butte as soon as the new wagon road is completed. Rockwell and Bicknell say they have sixty mules to put into the service. There are nearly 100 men at work on the road which will be completed by the first of September. This road will bring Ashcroft fifty miles nearer the railroad than the Leadville or Buena Vista routes, and means ten dollars per ton freight on ore instead of sixty dollars, which was paid last year. In fact, it gives life to the district and insures immediate and permanent success.

It is estimated that there are at least twenty-five pay mines in the district, and scores of other properties are almost on a paying basis. When the new road is completed the cost of supplies will be reduced fully one-third; this will encourage miners and capitalists, and development work will be pushed vigorously. There are over 1,000 men at work in the mountains already, and new parties are starting in daily.

Estimates of the possible daily output, made by competent, conservative men, give:

West Castle and Conundrum basin . . . . .	70 tons.
Aspen . . . . .	150 "
Ashcroft . . . . .	260 "

The West Castle and Aspen ores are also of a fine smelting quality. This product is directly tributary to the Gunnison Valley, and unless smelting facilities can be secured in the valley this ore must pass on through to Denver, Pueblo or Leadville.

#### CRESTED BUTTE.

Crested Butte has no mines very near to it, and is more noted for its wonderful coal banks than as a min-

accruing on the same.

ing camp. It has a large extent of mineral country tributary to it, however, and will soon have much more. To the northwest, up Slate River, are the rich discoveries of Wolverine, Redwell, Poverty, O-Be-Joyful and other basins, and Washington Gulch. With the exception of a few the mines are not in condition to immediately begin turning out ore. Development is going ahead very rapidly just now, however, and, with the promise of a good ore market, an output of from fifty to one hundred tons of high grade ore per week might confidently be expected by the time the smelter was built.

#### THE RUBY DISTRICT.

Of the camps to the north and tributary to Gunnison, last but not least, comes Ruby. It is, perhaps, the best known camp in the county, and has done more than any other to make the reputation of the Gunnison among eastern people. The camp is situated seven miles almost due west of Crested Butte, its nearest railroad point at present, and thirty-five miles a little west of north from Gunnison. The South Park is graded to the town, and the Rio Grande will also build to it, so that the camp is sure of railroad communication at no distant day.

At least twenty-three mines in the camp may be called producers, having either shipped ore or taken it out ready for shipment. The best known and most important of these is the Forest Queen, which has shipped fully 500 tons of ore, averaging 200 ounces in silver to the ton. The Ruby King, Ruby Chief, Venango, Durango, Lead Chief, Bullion King, Monte Christo, Micawber and Independence have also taken out considerable ore, and the claims that have taken out from one to five tons may be counted by the dozen.

The ores are generally silicious, and are considered dry or refractory. The silver commonly appears as ruby, native, wire and brittle, and there is also considerable zinc blende and arsenical iron, which runs well in silver. The ores contain considerable zinc and arsenic, a little galena and antimony, and all have a trace of gold, and occasionally some copper is found. The Micawber, for instance, is a monster vein of galena and copper, but unfortunately runs low in silver. The ore taken out of the mines so far has averaged from fifty to two hundred ounces in silver to the ton.

At present the output of the camp is very small, but within ninety days the camp could be relied upon to produce twenty-five tons of ore per day which would average at least fifty ounces in silver to the ton. The Pioneer stamp mill has recently started up and is now in full blast. It finds no difficulty in getting all the ore required.

The altitude of the principal mines is from 10,500 to 11,000 feet. The cost of hauling a ton of ore to Crested Butte may be placed at \$4.50. The foregoing include the camps which are directly tributary to Gunnison, and which may be relied upon to send their ores there for treatment in case a large smelter is erected. The estimates given are very low, even taking the backward season into account. In all parts of the county the season was fully a month later than usual, and this has had the effect of retarding development. The output of the Gunnison country may be considered small, but under all the circumstances the country has done remarkably well. The first few years have been necessary to get a good start, and from this time forward the output of ore will be steadily and constantly on the increase.

Not only can Gunnison command the wonderful mineral riches of its own county, but all the vast region to the south and west can also be made tributary to it.

#### THE IMMENSE ORE FIELDS OF THE SOUTHWEST.

The completion of the Denver & Rio Grande railroad to Utah and of its various branches to Lake City and other points in the San Juan and San Miguel regions, will open up an immense mineral field and put all the camps in that part of the State in direct communication with Gunnison. The rich mines of Lake City, Engineer Mountain, Burrough's Park, Rose's Cabin, Capital City, Sherman, Bear Creek, Ouray, Mount Sneffles, Cimarron, San Miguel and Ophir Districts, will thus become tributary to it. The vast extent of territory and the wonderful richness and variety of ores contained in these districts would take volumes to describe.

Lake City is fifty-six miles southwest of Gunnison. There are situated the celebrated Ute, Ulay, and Ocean Wave mines, all of which are considered among the great mines of the State. On Engineer Mountain and vicinity, are the Frank Hough, Red Cloud, British Queen, Annie Woods, Polar Star, Dolly Varden, Palmetto, Black Silver, Inter-Ocean and hundreds of others. The ores from these mines include almost every known variety, and their richness may be conjectured when it is stated that their owners have been packing the ore on burros across the mountain to Rose's Cabin, thence by wagon to Alamosa, and from there by rail to Pueblo and Denver, and yet with all this expensive shipping, the mines have paid a steady profit.

Engineer Mountain is but twelve miles from Lake City, and the Bear Creek and Mount Sneffles Districts lie just north of it. From Ouray down the Uncompahgre to where the railroad crosses that stream is but thirty miles. The San Miguel District proper lies on the north fork of the river of the same name and just west of Engineer Mountain, while the Ophir District lies further

west on the north fork of the San Miguel. All this vast region can easily be made tributary to Gunnison.

THE GREAT CARBONATE CAMP, A FEEDER.

It may seem at first sight a startling proposition to say that Leadville, too, is tributary to Gunnison, and yet a moment's consideration will show that the proposition is not so absurd after all. Look at the facts. From Leadville to Denver or Pueblo is much further than from Leadville to Gunnison, and over a much rougher country. Take the Rio Grande railroad for instance. Ore shipped from Leadville must come to Salida to reach either Denver or Pueblo. From Salida to Pueblo is ninety-seven miles; from Salida to Denver is 217 miles; from Salida to Gunnison is but seventy-three miles. The completion of the South Park branch of the Union Pacific to Gunnison will bring Leadville and Gunnison much nearer together.

The Gunnison coke is much superior to either that of Trinidad or El Moro, and the Gunnison country is now shipping coke to the smelters of Leadville. This traffic will be constantly on the increase, and while Leadville will always have smelters of its own, a certain quantity of the ores of that camp will be shipped out for treatment. Why should not those ores go to Gunnison? It will be cheaper than hauling the coke to Leadville, and as Leadville will require a large amount of coke anyway, the railroads would thus have freight both ways. The Leadville ores could be transported to Gunnison at small cost, and the cars could load back with coke and coal.

Vast as are its treasures of the precious metals, they form but a small part of the great natural wealth of the Gunnison country. Perhaps no other country of equal extent on the face of the globe can show the same vari-

ety, extent and richness of natural resources. One locality may have silver, another gold, another iron and another coal. The Gunnison country has them all and marble, lime and fire clay as well. A history of the natural resources of the Gunnison country almost staggers belief.

IRON, COAL AND LIME.

Iron, coal and lime are all found within easy distance of Gunnison City. As for iron, it is found in a dozen different localities, a few of which only need be named. Eighteen miles south of town are large deposits of brown hematite, containing seventy per cent. of metallic iron. Twenty-five to thirty miles southwest of Gunnison, on the Cebolla, are immense beds of magnetic ore of good quality, yielding from eighty to ninety per cent. of metallic iron. This is now being used in Crook's reduction works at Lake City. Twenty-eight miles north of Gunnison, on the line of the railroad between Crested Butte and Ruby are large deposits of bog ore, which is said to be of an excellent quality, and which is easy of access.

Thirty miles east, on the Tomichi, twenty-eight miles north on Taylor River, and also on Spring Creek, large bodies of brown hematite, bog and magnetic ores are found of excellent quality. In the Tomichi district immense veins of iron carbonates and brown hematites are found which run from sixty to eighty per cent. iron, and from five to six ounces in silver to the ton. Nearly every camp in the county has vast iron beds.

Assays of the Cebolla ore at the Denver mint gave seventy per cent. of metallic iron.

Of the same ore the following analysis has been written and forwarded by Otto Wuth, analytical and consulting chemist, of Pittsburg, Pennsylvania:

Water . . . . .	.94
Allumina . . . . .	.48
Peroxide of iron . . . . .	38.66
Magnesia . . . . .	.37
Sulphuric acid . . . . .	.012
Silicic acid . . . . .	1.87
Magnetic oxide of iron . . . . .	56.63
Lime . . . . .	1.02
Phosphoric acid . . . . .	.019
Phosphorus . . . . .	.0084
Metallic iron . . . . .	68.06

## [REMARKS.]

The analysis speaks for itself. There is no better ore to be found anywhere in the United States.

[Signed]  
PITTSBURG, April 1, 1881.

Yours respectfully,  
OTTO WUTH.

## PLENTY OF COKING COAL.

Several veins of the finest coking coal have been opened at Crested Butte, and the Colorado Coal and Iron Company now have extensive coking works there, and are constantly shipping coke across the range to the smelters at Denver, Leadville, Pueblo and other places. The coal so far has been coked successfully in the open air, but as that method leads to some waste, the company will this season erect extensive coking ovens. A vein of coking coal has also been found on Ohio Creek, about eighteen miles north of Gunnison, but has not been worked yet to any extent. Of the ordinary bituminous coal large veins are found at Crested Butte, on Ohio Creek and at Mount Carbon and other places within from eighteen to thirty miles of Gunnison.

The anthracite is found on Slate River, just above Crested Butte, on Rock Creek, on Anthracite Creek, near Irwin, and west of that place in the Reservation, the distance from Gunnison, down grade, varying from thirty to sixty miles.

An analysis of the Crested Butte anthracite was made by Prof. Williams, of Philadelphia, last October, and gave the following result:

Moisture (at 212 Fahr.) . . . . .	1,588	per cent.
Volatile matter (at red heat) . . . . .	5,862	"
Fixed carbon . . . . .	89,780	"
Ash (red) . . . . .	2,770	"
	100,000	

An analysis of the bituminous coal gave the following result:

Water . . . . .	3,730
Fixed carbon . . . . .	61,126
Volatile matter . . . . .	30,077
Ash . . . . .	4,472

The coal in the neighborhood of Crested Butte has been examined by coal men from Pennsylvania and pronounced the best coking coal in the United States. The following analysis of the Crested Butte and of the best Pennsylvania coking coal is given:

## CRESTED BUTTE COAL.

Fixed carbon . . . . .	72.60
Ash . . . . .	3.10
Gas . . . . .	22.80
Moisture . . . . .	1.10
Per cent. of coke . . . . .	75.70

## CONNELSVILLE (PENNSYLVANIA) COAL.

Fixed carbon . . . . .	65.00
Ash . . . . .	6.50
Gas . . . . .	24.00
Moisture . . . . .	4.50
Per cent. of coke . . . . .	71.50

These figures speak for themselves and need no comment.

## MARBLE, LIME, BRICKS, ETC.

At the head of Rock Creek, about forty miles north of Gunnison, immense beds of marble have been found. The quality of this marble is very variable. Some of it is of a superior quality, being very fine and hard. Some of it is coarse and soft, and some just right for building purposes. It is of every shade and color, and includes jet black and pure white, but the great mass is clouded, and the colors yellow, green, blue and black may be found in the same piece beautifully blended. Some is white with cubes of jet black, evenly distributed throughout. One variety is precisely like the fine Tennessee marble, and seems to have been made of pebbles of every color, cemented in a white ground. No effort has yet been made to utilize this vast deposit, but the time is coming when it will become one of the great resources of the Gunnison country.

Excellent brick clay has been found in abundance within two or three miles of Gunnison, and four yards are now running with a capacity of 400,000 brick per week. Fire clay of excellent quality, as well as large beds of kaolin have also been found close to Gunnison. Extensive lime quarries have also been discovered near there. At present three quarries of lime stone and two of calcareous spar are being worked within ten miles of Gunnison, and are yielding 2,000 bushels of as good lime per week

as can be found in the State. Inexhaustible quantities of white and mottled sandstone, for building purposes, are also found within a mile of this place.

The foregoing is but a brief sketch of the natural resources of the Gunnison country, but enough has been said to show that at no distant day it will become an important factor in the great wealth of the youngest of the States. The region has many bustling, thriving towns, but Gunnison from its many advantages of location and otherwise is bound to become, not only the great smelting and business point west of the range, but the home of blast furnaces and iron manufactories as well. The early completion of the Denver & Rio Grande and of the South Park branch of the Union Pacific through to Utah, will bring the cheap food supply of that Territory to Gunnison, and thus materially reduce the cost of living. Other railroads are turning longing eyes in that direction, and it is almost certain that one or two of them, if not more, will build into the Gunnison country at no distant day. The advantages of Gunnison as a smelting point is already attracting the attention of smelting men, and negotiations are now in progress which, when consummated, will give to Gunnison the largest smelting enterprise in the State. The owners of works of smaller capacity have also signified their intention of coming to Gunnison, and there is every probability that at least one of them will have his works in operation before the close of the present season.

## THE RESERVATION.

The opening of the old Ute Reservation, which is now an accomplished fact, will be of untold advantage to Gunnison, opening as it does a vast extent of rich agricultural, pastoral and mineral land at its very doors. Heretofore the Reservation has been a sealed book, but it

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will remain so no longer. Within a few years its valleys will be made to blossom as the rose. It is known to contain thousands of acres of excellent coal land, and there is good reason to believe that deposits of the precious metals equaling those in any other part of the State, will be found within its borders.

Gunnison stands at the gateway to all this vast region and will reap a direct benefit from its growth and prosperity. It can therefore be seen that, wonderful as has been the growth of Gunnison thus far, its future will far eclipse its past, and that it will continue to grow and flourish until it becomes what nature intended it should be, the metropolis of Western Colorado and the second city in the State.

This little book is published by the Board of Trade of Gunnison City for the purpose of giving information to those who desire it regarding Gunnison and the Gunnison country, and its officers will be happy at any time to give further and fuller details regarding any subject mentioned herein. Persons visiting Gunnison for the purpose of seeking investments of any kind, by making themselves known to the President of the Board of Trade (Mr. E. W. Burton) will be put in the way of receiving such information as they desire, not only in regard to Gunnison, but in regard to any other part of the county as well. The Gunnison country needs capital to develop its resources, and it only asks that capitalists come and examine those resources and advantages for themselves, feeling sure that the verdict will be that nowhere else in the west can safer or more profitable investments be found.