

lation. There are colleges and academies at Bentonville, Rogers, Pea Ridge, Mason Valley, Siloam Springs, Gentry and other



towns of Benton county and more than a dozen daily newspapers. A hundred public and private schools offer educational facilities that would not be overtaxed by an immediate access of 25,000 people.

It is not easy to understand why emigrants seeking for cheap lands of proved fructivity will "jump over" a region so singularly blessed with every gift of nature, to go further and perhaps fare worse. If you would write to Mr. Berkely Neal, Van Buren, Crawford county, he would send you a mass of information well calculated to astonish those who do not know that the berry farmers around Van Buren last year netted more than \$15,000 from the strawberries sold in that town alone. There are as yet no authentic figures as to the quantities of apples, peaches, pears, cherries, grapes and other small fruits raised in these northwestern counties of the state, but it is a matter of record that at every exhibition, fair, exposition or horticultural display in which the growers of this section have exhibited the examples shown have outranked all others in point of QUALITY. In perfect texture, in color, in flavor, in freedom from scars and diseases, the Arkansas apple is, par excellence, the champion of the world.

Passing southward into Washington county, with its 890 square miles, the pau-

city of population in this wondrous region becomes even more apparent and more astonishing. There are today more than twenty-five thousand acres of Government lands in this county open to homesteading, and in most cases bearing timber that is worth twice the initial cost of acquiring and perfecting a title. Upon its alluvial soil every cereal known to the temperate latitude will prosper. Washington county is called the "grain belt" of Arkansas because its fields will yield 50 bushels of corn, 20 bushels of wheat or 40 bushels of oats on every acre so planted. In addition to its cereal productivity there are thousands of acres of fruit lands as perfectly adapted for orchards as can be found in the world. Concord, Norton's Virginia, Neosho and Delaware grapes seem to surpass the best performances of their native soils when once installed in the favorable vinelands of Washington county.

Sebastian county, further south, is richer in mineral endowments than any similar area of the southwest. Fort Smith, its chief city, has a population of more than 20,000. It is a hive of factories and founderies, and yet one of the comeliest, cleanest manufacturing towns in this country. The coals of Sebastian county, like the apples of the state, excel all others in qual-



Farm Scene at Miller Springs, on the Big Piney River.

ity. They are smokeless. The Quartermaster General of the United States officially reports that the heating capabilities of Se-

bastian county coal are from 25 to 100 per cent greater than any other in the world with the exception of the Pocahontas coal of West Virginia. The available supply, if not inexhaustible, is so vast that the output of its mines has made no perceptible impression upon the deposits already surveyed. But the mineral wealth of this county has subtracted nothing from its agricultural

of beautiful scenery, good weather and certain utility, in the United States. I am told that there are other portions of the state that equal if they do not surpass the four counties which I have briefly mentioned in this writing. I believe it, though I can't prove it. I know that the statements I have made seem tame and trite in print after a short visit to the territory



Along the White River.

and horticultural endowments. It yields cotton and wheat, corn and potatoes, of the highest quality and the greatest profusion. It has true forests, including almost every timber known to the middle timber regions. Its topography is the warrant for, and the explanation of, its high sanitary rating.

These are but a few of the facts and salient characteristics of a section of Arkansas that is, I believe, the rarest combination

itself. But out of it all I would like to convey some measure of the impression made upon an experienced traveler, by the uniquely gentle beauty of its contour, the caressing tenderness of its sky and air, the alluring commingling of grandeur with simplicity, of freedom and domesticity that distinguishes this portion of Arkansas from any other section of the United States.

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## JASMINE.

BY JAMES JEFFREY ROCHE.

I envied my sweet flower lying  
 Upon a breast more sweet and fair,  
 And it with envy, too, was dying,  
 To find its charms transcended there.

When morning came the flower was missing,  
 Its bloom and beauty vanished quite.  
 I envy still; for it perished kissing  
 Its life away on her bosom white.

—Smart Set.

# THE GREAT LEAD AND ZINC FIELDS.

BY THOS. F. MILLARD. I

What the Witwatersrand is to the world as a producer of gold, the great Joplin lead and zinc district is as a producer of those humbler but even more necessary metals. Both camps, if settled communities bubbling with life and business activity may be so termed, are at the head of their class, and they have many points of similarity, even to the more than superficial observer. Entering the Joplin district from the eastward, by way of the Frisco System, I was at once struck with the outward resemblance. In fact, it would have required but little exercise of the imagination to have fancied myself looking from a car window out upon the seething environs of Johannesburg. The landscape is almost identical. There are the wilderness of smoking funnels standing against the sky like a limbless forest, the vast slate-colored dumps of tailings, the labyrinth of car tracks, puffing switch engines and swinging derricks; the succession of "camps," some approaching the dignity of cities, where on every side prospect shafts and mines dispute the surface of the earth with pretentious buildings; the suggestion of a community which at one moment represents all steps along the path of progress; and, pervading it all, the indelible impression of restless, untamable energy.

It is now more than 50 years since lead was discovered in southwest Missouri, near the Kansas border. The first attempts to mine were made near the present site of Joplin. For many years the business was conducted in the most primitive fashion, and under difficulties of almost overpowering nature. The town of Booneville, on the Missouri river, whence the ore could be shipped via water to market, was the nearest available point located on an avenue of commerce, and it had to be hauled there in wagons. However, in time these adverse conditions were ameliorated, and when the St. Louis & San Francisco railroad penetrated the southwest, capital soon saw its opportunity. From the date of acquirement of

railroad facilities, the real development of the mining district began. Since then its story has been one of comparatively uninterrupted progress. The district now supports directly and indirectly, some 200,000 people. From a few acres, it has spread over the greater part of Jasper county, Mo., and across the line into Kansas, covering some 600 square miles. It includes the towns of Joplin, Webb City, Carthage, Carterville, Oronogo, Central City, Duenweg, Spring City, Neck City and Chitwood, in Missouri, and Galena, and a number of small camps in Kansas. Properly the district should include the great coal district lying around Pittsburg, Kansas, for, owing to the fact that it is cheaper to transport lead and zinc than coal, nearly all the smelters have located near the coal mines. Thus it is no exaggeration to say that much of the industry lying within the borders of the Kansas coal district derives its support from the lead and zinc mines.

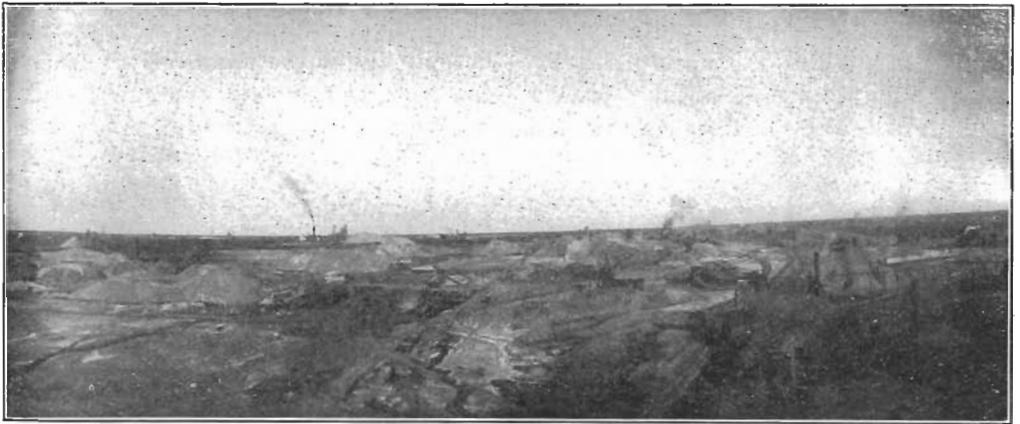
Especially in recent years, the growth of the district has been remarkable. Zinc was not discovered until 1874, when a chemical analysis of some peculiar looking stuff that had been habitually cast upon the waste dumps of the lead mines revealed it to be zinc ore of the highest grade. It was not long before lead mining took a secondary place, as zinc mines were rapidly opened. Reports of the new discovery brought thousands of people into the district, and prospecting began to be extensively carried on. Between 1889 and 1899 the annual output of the district rose from less than \$3,000,000 to nearly \$11,000,000. Of this, the zinc production furnished probably, on the average, nine-tenths of the value. Since 1899 the output has fallen off slightly in total value, but this has not been due to a decrease in production. The unusual value of the 1899 product was due to extraordinary prices which were more than double those of the previous year, and about 25 per cent greater than at the present time. As

few persons anticipated that the extraordinary prices of 1899 would be maintained the subsequent depression gave the industry no permanent set-back, and the mining community is very well satisfied with prevailing conditions. Present prices are more than 100 per cent greater than prices five years ago, and the general tendency of the market seems to be upward, owing to the constant opening of new markets and uses for zinc products.

In 1898 what was considered a tendency on the part of the zinc smelters to keep down the price of ore, resulted in the organization of the Zinc Miners' Association, with headquarters at Joplin. Conditions at that time were such as to enable the

Once the development stage is past, the poor man finds himself unable to go ahead, and is usually compelled to sell out to persons who can command capital. For years, now, in the Johannesburg field, all claims have been in the hands of a capitalistic combination, composed of multi-millionaires, which, until it is ready to operate them, lets them lie untouched, to the exclusion of any who may desire to work them. Peculiar conditions in the Joplin district render it difficult—some persons say impossible—for any combination that might be formed to control operations in the lead and zinc fields.

"Any company that tries it," said a prominent Joplin capitalist, who is thor-



Panoramic View near Joplin.

smelters to practically regulate prices, which they did to their own advantage in some instances, and to the disadvantage of the miners. After a season, during which the Miners' Association exported considerable quantities of ore to Belgium at a loss, improved relations with the smelters followed, and relations between the producing and purchasing branches of the industry are now more satisfactory.

The district is frequently referred to as "the poor man's camp," and it seems that the title is not undeserved. In a great majority of mining districts poor men have practically no chance to operate after the field has once been thoroughly "proved up."

oughly conversant with the situation, "will go broke sooner or later, and it probably will be sooner."

Then he went on to explain.

"One reason—and it is a good one—is that the field is too large. It is difficult to conceive the organization of a company with sufficient capital to purchase or control, at the prices the owners hold it at, 600 square miles of land. Even if the money could be raised for such a purpose, there is no possible way by which dividends on the money invested could be paid. The chances are, on the contrary, that an attempt to develop the field would soon result in bankruptcy. While the entire district is

theoretically mineral bearing land, it is only in certain localities that zinc or lead can—or has been—found in paying quantities. People who have made a study of the field are confident that the whole country is underlaid with both lead and zinc, in practically unlimited quantities; but undoubtedly much, if not most of it, lies at depths beyond present facilities. In time, there is no doubt that we will mine successfully at great depths, but at present, and for years to come, we will be compelled to pick our ground. At present most of the ore being worked lies just beneath the surface of the ground, and mining is rarely conducted at a greater depth than 150 feet.

“The district was developed in the beginning, and is still being developed by poor men. Conditions favor them, or rather, give them opportunity. There is not a property owner within the limits of the district but has a chance of having a lead or zinc deposit under his farm or town lot. It generally happens that these men either lack the means or are reluctant to take the financial risk necessary to prospect for ore. Therefore, they are willing to permit others to prospect on their land, in the hope that a profitable discovery will be made. Here comes the opportunity of the poor man. It does not cost much to sink a prospect shaft, and miners, probably more than any other class of men, are deeply imbued with the speculative spirit. A number of miners, all of them working in the mines for daily wage, will club together, agreeing to pay each a certain sum daily or weekly, out of their earnings, to prospect. They will lease a piece of ground, and set a couple of men to work sinking a shaft. If they make a paying strike, they sell out to an operator, this class being composed of men of limited capital, who are able to work a prospect. If nothing is struck, the project is abandoned, and the miners regard their losses philosophically, taking another chance as soon as they can afford it.

“By this method, the operating mines develop other mines, and a certain percentage of the wages of the district goes toward ad-

ditional development. Capital is not called upon to risk until it has something tangible to operate upon. Then it takes hold. It is perfectly fair for all parties. If capital attempted to prospect the district, it would fritter its substance away before the real business of ore production began. This has been the experience of those who have tried it, almost without exception. When I tell you that not over five per cent of the known mineral bearing land has been prospected, you will see that the poor man's opportunity has by no means passed away in the district. There will be room for him for a long time to come.”

The method of conducting business in the district is unusual, but from its practical working seems entirely satisfactory. Nearly all the mines are operated under leasehold by the terms of which a percentage of the output goes to the owner of the land, and the remainder to the operator. Once a week the buyers for the smelters visit each mine, and bid for the weekly product. These buyers are experts in estimating the value of “jack” as the concentrated ore is locally called, and by merely glancing at a dump can tell almost its exact value. Every Saturday the “jack” purchased during the week is paid for. However, payment is not made to the mine operator, but to the owner of the land, who takes out his percentage and gives the remainder to the lessee. It frequently happens that after a tract of land is leased by a certain party, he will divide it into small lots and sub-let them to small operators. This results in diversifying the interests, and prevents too much power over the destinies of the district from being concentrated.

Promptly at 5 o'clock every Saturday afternoon, the operators pay their help, which constitutes the great working force of the district; the weekly output of all the mines is about \$200,000, of which probably \$50,000 goes into the hands of the miners. From them it passes on into ordinary channels, and eventually the greater part of it reaches the shops.

It is interesting to be in Joplin on a Sat-