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Salida Springs and Mines.

As a health resort this young and growing city, with a present population of about 3,000, promises to rival Colorado Springs, Col.

Situated in the heart of the Rocky Mountains, in the valley of the Arkansas River, at its junction with the South Fork, at an altitude of about 7,000 feet, and surrounded by lofty and snow-covered peaks, averaging 14,000 feet high, with many hot and cold mineral springs of medical virtues at hand, and an equable climate devoid of sudden and severe changes, it offers superior advantages as a residence to consumptives and other invalids.

Snow is seldom seen on its streets during the most severe winters. The high peaks by which it is surrounded protect it from the protracted snow and rain storms sweeping in from the plains, that are so often experienced in towns adjacent to the easterly foot hills of the Rockies. Salida is Spanish, meaning a clear view.

The Sedalia Copper Mine, of Salida, Col., is one of the extremely few lucrative copper properties within the boundaries of a State where gold, silver, and lead ores predominate. It is located in the Rocky Mountains, in the valley of the Arkansas, on the line of the Denver and Rio Grande Railway, 100 miles west of Pueblo.

On account of the low price of copper and the indifferent management of its owners, it was abandoned for a time; but the recent advance in the metal attracted to it the attention of some skilled metallurgists, who leased the property for a term of years and at once shipped the entire dump to market. They have since prosecuted the work with such judgment and activity as to yield them handsome returns, and are now shipping about seventy tons of its ore daily, the average grade of which is from 25 to 30 per cent copper. One vein of black oxide, one foot wide, averages 68 per cent copper.

Owing to the difficulty in obtaining satisfactory treatment of the ore at the West, it is now shipped through by rail to New Jersey and New York, at a transportation cost of \$13 to \$16 per ton.

A tramway is in construction to connect the mine on the mountain side with the Denver and Rio Grande Railway, which will greatly facilitate operations.

Zirconia Minerals.

At the last meeting of the New York Microscopical Society Mr. George F. Kunz exhibited sand containing monazite, phosphate of cerium, lanthanum, and didymium containing from 0 to 17 per cent of thoria, from Brindletown, Burke County, N. C., and monazite sand from Caravilhas, Brazil, stating that the demand for these minerals had greatly increased of late, owing to the rare earths zirconia, thoria, glucina, etc., which they contain, and which are now used for the mantle or hood of the new incandescent gas burner invented by Dr. Carl Auer, now Von Welsbach, of Vienna. This increased consumption has led to a search by the collectors and dealers in minerals in England, Germany, France, Russia, Norway, and Brazil, and more especially in the United States, and so thorough has the search been that the prices of minerals which were considered rare a short time ago are now quoted at one-tenth to one-hundredth former figures.

The minerals containing these rare earths are: Lanthanite, sipylite, tysonite, uranohorite, orangite, thorite, cleveite, monazite, beryl, yttrorantalite, alvite, erdmannite, cerite, xenotime, fergusonite, aeschynite, allanite, zircon, endialyte, euxenite, samarskite, gadolinite, and bodenite.

Of these, beryl, cerite, monazite, allanite, and zircon have been obtained in large quantities.

Sipylite, orangite, and thorite are specially sought for.

Monazite has been found at the following localities: Villeneuve, Ottawa County, Canada, a crystal of 1 1/2 pounds; Alexander County, N. C., at Milholland's Mill; Amelia County, Va., in 20 pound lump; Norwich, Conn.; Ural Mountains, Mt. Sorel (var. turnerite), Tavetch (var. turnerite), Binnenthal, Switzerland; Southern Ural, River Sanarka; Arendal, Norway.

At these localities the occurrence is of mineralogical interest only, except at some of the North Carolina, Georgia, and Brazilian localities, where it can be obtained in quantity for commercial use.

In the North Carolina gold gravels of Rutherford, Polk, Burke, McDowell, and Mecklenburg counties monazite is found in considerable quantities in small brown or greenish or yellowish brown monoclinic crystals, associated with chromite, garnet, zircon, anatase, corundum, menacinite, xenotime, fergusonite, epidote, columbite, samarskite, and other minerals. With these associations in North Carolina and at the Glade Mine, Georgia, have been found several diamonds.

From these localities will be furnished tons of monazite within the next twelve months.

The Brazilian monazite is found at Caravilhas, Bahia, where its existence was made known about eight years ago by Dr. Orville A. Derby, geologist of Brazil. It occurs in large quantities as a beach sand, almost free from other minerals, as if concentrated. As it occurs on the coast, it can easily be shipped to any

point where it is wanted, and a number of tons have been sent to the United States.

The best zircon locality is on the old Meredith Freeman estate, Green River, Henderson County, N. C. The lease was for 25 years in the hands of Gen. T. L. Clingman, of that State, who, as early as 1869, mined 1,000 pounds of it, and who during that whole period never lost faith in the incandescent properties of zirconia, but when the time of its adoption actually came, through some legal difficulties the General had forfeited his leases, and hence failed to reap his reward.

In Henderson County, N. C., and in Anderson County, S. C., zircons are found in large quantities loose in the soil, as the result of the decomposition of a feldspathic rock. The crystals are generally remarkable for their perfection, weighing occasionally several ounces, and are distinctive at each locality. The recent demand has also brought to light the existence of enormous quantities of zircon in the Ural Mountains and in Norway.

Although in Canada, in Renfrew and adjoining counties, enormous crystals have been found up to 15 pounds each, yet they are so isolated that it would be impossible to obtain a supply there.

The new demand has brought together more than 25 tons of zircon, 10 tons of monazite, 6 tons of cerite, thousands of pounds of samarskite, and tons of allanite and other minerals. As a consequence, zircon is now offered at less than 10 cents a pound, monazite at 25 cents, and samarskite at 50 cents.

Why Mechanics are Out of Employment.

There are said to be many thousands of mechanics and other workmen in Chicago out of employment. This is not altogether due to local causes, says our contemporary, the American Artisan, for it is true that men are constantly flocking here from every quarter expecting to find employment, only to find the labor market already glutted. The daily papers tell us there is a surplus of labor in other cities also, and consequently large numbers are idle. Part of this is due to the rapid influx of people from other countries, who largely gravitate to the large cities. But in Chicago it is the fact that her own workmen might be nearly all employed but for their own agitation and unwise demands. The strikes and the threatened strikes among the mechanics of the building trades at the beginning of the season had the effect of deterring many capitalists from making contracts for contemplated new building enterprises and other improvements, by an apprehension of delays and annoyances from labor disturbances. It is safe to say that the investment of millions of dollars, which at the beginning of the season were ready to be put into new business and residence structures in various portions of the city, was frightened into other channels on this account. All kinds of businesses dependent for a portion of their prosperity upon the amount of building which is being done feel the effect of this, as well as do the workmen themselves.

Decomposition of Silk.

Dr. Weyl lately gave an account before the Physiological Society, Berlin, of the results of his further researches on silk. Among the products of decomposition of albumen and proteid substances, one is known as a snowy crystalline body, which is considered to be leucine, and is generally regarded as being also a product of the decomposition of silk. Since this substance may be obtained in large quantities by the decomposition of silk, the speaker had prepared it from this source and analyzed it, and has come to the conclusion that it is not leucine (amidocaproic acid), but rather another amidated acid, namely, alanin. Of the two possible isomers of alanin, it is alpha-alanin which is obtained by the decomposition of silk. Dr. Weyl laid stress on the fact that Schutzenberger had also concluded that alanin and glycocoll occur among the products of decomposition of silk, notwithstanding that, during his elaborate and careful researches on proteids, he employed a method which is as unfavorable as can be imagined for determining this point, this result is now confirmed by the speaker's researches. Schutzenberger's further supposition, that an amido-acid of the acrylic series can be prepared from silk, was not supported by Dr. Weyl's analyses.

Long Run of a Furnace.

Mr. G. C. Stone, of the New Jersey Zinc and Iron Company, Newark, N. J., reports that one of their two furnaces recently blew out after the longest blast ever made at the works, and the longest run on spiegel that has yet been made, being three years and two days. The product was:

Table with 4 columns: Tons, Cwt., Pounds, and a fourth unlabeled column. Rows include First year, Second year, Third year, and Total.

The average yield of ore was only 31.5 per cent. The spiegel averaged 19.55 per cent manganese. It required 2 tons 9 cwt. 23 pounds of coal to the ton of iron, and made about 6,000 pounds slag to each ton of iron.