DID TOLTECS MAKE COAL?

Where Did Arizona Indians Get Anthracite by the Ton.

Buried Reservoirs Found Filled with Coal in Ancient Ruins Near Tempe —One Hour Ride of Tempe Contained More Than Three Tons.

[N. Y. Evening Sun.]

Southern Arizona has long been noted for the abundance of its evidences of the pre-Columbian civilization of the Toltecs. The mountain tops are show castles and watch towers. For up precipitous canyon walls are yet to be found the curious habitations of the cliff dwellers, and on the broad valleys and mesas below lie the ruins of cities surpassing in magnitude the settlements of this latter day.

Casa Grande, the "Great House," near Florence, is celebrated even to the degree of being placed under governmental care and protection, but sixty miles to the southwest of Florence lie ruins far more extensive and no less great, or interest in the exploring section might. The locality of the ruins may or may not be clearly stated as in the vicinity of Tempe, about twelve miles from Phoenix, Arizona's capital city. Here it was that Frank Hamilton Cushing, sending the Hemingway archæological expedition, labored so long and with such material benefit to the cause of historical science.

Los Muertos, the "City of the Dead," wherein the resurrectors of the Hemingway expedition were mainly presumed, lies seven miles to the southwest of Tempe. Within a dense forest of giant mesquite trees that now grow upon it are the evidences of the city by for miles on either hand. For the greater portion, shown only by mounds of debris, to be passed by the casual observer as mere inequalities in the sandy surface, there is yet prominent at the city's center a vast pile of what was in the olim past undoubtedly a castle, the government house, where resided the controlling power of that nation of long ago.

For 100 miles to the southeast and southwest lay tributary cities, connected by a network of canals leading from the Salt river and its similar neighbor, the Gila, irrigating the lands that the husbandmen of the nineteenth century again tile and, apparently, by much the same methods.

From the photographic histories of their successors in Mexico, the Aztecs, much has been learned of these Toltec people, and by analogy much more has been logically deduced, yet the scientist must confess that not picture maligy guises him in explanation of the many mysteries that confront the investigator of the relics of Arizona's departed nations. It is probable that, like the record of Israel's lost Ten Tribes, the true story will never be known. Whence came they, whither they went, what caused the migration of at least a million people from a fertile land are questions that probably will never find true answer.

A Phoenix correspondent of the San Francisco Chronicle says that one of the supreme mysteries of these ancients lies in the discovery within the last few weeks of true anthracite coal within the boundaries of one of the ruined cities. It created a decided excitement among the few in Phoenix who were admitted to the secret of the discovery. An option was secured upon the land, within lay three miles northwest of Los Muertos, and work was begun at once on the development of what was thought to be the main cropping of a coal ledge, its black stain being traced in the granite-country rock for fully a mile.

But the coal was soon exhausted, and the miners were amazed to find that they had been cleaning out the contents of a gigantic pile, an urn buried to lie lip in the earth. The coal, to the amount of over three tons, was contained in a cocoanuts in the center of the lot, the termination of the cocoanuts being filled with clean charcoal. Around and supporting the coal and the charcoal the pile was filled with dry earth of a limestone character.

The pile had been made of a cement, the main ingredient of which was plainly the hydraulic lime of the region. Though such a combination needs no hardening from fire, the lip of the urn, in its finished pulp, showed the effect of intense heat. The pile was found to be about twelve feet deep, nine feet across the mouth and materially wider at half the depth—in no wise different in form from the drinking jars of that region today. The walls tapered in thickness from about eight inches at the lip to a maximum of eighteen inches near the bottom. The material was readily distinguishable from the decomposed granite into which the urn had been built.

The coal found is genuine anthracite, on the authority of several of the best mineralogists of the Coast, and contains every test of the assayer. It was found closely packed, though far from solid, and regularly stratified, as though in a true coal bi-nket. In a straight line to the southeast, paralleling at a short distance the course of an ancient canal, nine of coal were found sixteen upon the ground, and, following this "seal," five other piles were discovered, much smaller, but in every way similar in construction and contents to that first explored. One was not over three feet in depth, yet it contained the cone of coal. Without doubt a careful search along this line would develop many more such pile.

The discoverers, after secretly using every effort to locate coal in the nearby mountains, at last confessed entire inability to solve the puzzle. The formation for miles around is much the same, changing from porphyry to granite and then to sandstone, with occasional gold-bearing veins of copper and iron-tinged quartz. A region where the geologist would scout the existence of a deposit from the carboniferous age. A hundred miles to the northeast is the nearest coal, a sulphurous lignite that in places may be called bituminous.

In out, if the writer be not decidedly mistaken, this "jetted coal" of the Salt River valley is the only anthracite ever found west of the Mississippi.

The ollas lie within one of the Toltec pueblos. A few hundred yards from the largest are the ruins of a large cotte, the walls of which were exposed by the work of the Hemingway expedition. Under the circumstances the question is natural, "Can this coal be an artificial product made by these Toltecs?"

I must admit that, while I cannot see where the coal could come from, the theory of its manufacture is impossible, indeed. Modern science can take wood, and by heat and pressure and at great expense produce a lignite. Charcoal, a pure carbon, is, of course, easy to obtain, but the production of anthracite, with its lower percentage of earthy matter, is beyond the skill of the modern experimentalist. If manufactured by the Toltecs, it is probable that it was made in the great pueblo wards found, though not a sign of an air blast hole could be detected, nor an implement that would aid in a fluid explanation. Fragments of pottery fairly cover the ground near by, all marked with the common Toltec ornamentation of terraces, lightning flashes and wave lines, but in no manner do they throw light upon the subject.

Uncle comes to be no logical or plausible theory to offer. The enthusiasts there let him who can take the reins.

Land Office.

The following filings were made in the local land office under date of Sept. 20th:

Sarah E. Allred, of Ferron, Emery county, desert entry of the southeast quarter of the southeast quarter of section 22, and the northeast quarter of the northeast quarter of section 27, township 19 south, range 7 east.

Harry M. Jackson, of Toquerville, Washington county, desert entry of the southwest quarter of the southeast quarter of section 14, township 41 south, range 13 west.

Joseph Gourley, of Portsville, Morgan county, homestead entry of the northwest quarter of section 30, township 3 north, range 3 east.

AMUSEMENTS.

HAVERLY'S MINSTRELS play at the Theater on the evenings of the 20th and 21st. Burt Shepherd heads the list of names.

PROF. DAYNES' organ recital occurs at the Tabernacle this evening. In addition to organ solos by several of his pupils, Mrs. Hamilton will play, Mrs. Edwards and Mrs. Agnes Olsen Thomas will sing a new duet, and Mr. Roberts will sing a new song called the Sentinel, both of which are of Mr. Daynes's composition.

J. H. STODDARD is expected to arrive from New York on the 29th inst., to begin rehearsals with the Home Club.

To be Tried Next Week.

Criminal cases will be taken up in the Third district court next week in the following order:

MONDAY.

Frank Johnson and Earl Jarnuth; grand larceny.

D. G. Johnson; assault with a deadly weapon.

W. H. Barnett; forgery; three cases.

Frank Johnson; grand larceny.

TUESDAY.

Frank Richards and Emma Thomas; fornication.

A. C. Gilbert; burglary.

W. S. Grawell; grand larceny.

WEDNESDAY.

Frank Willard (true name, Henry Brown); burglary.

Brighton Republicans.

A Republican League club has been organized at Brighton precinct with the following officers: John A. Shearer, president; John E. Schoenfeld, vice-president; Israel Spitz, secretary; Will R. G dee, treasurer.

Executive committee—Joseph F. Schoenfeld, Fred Bouler, Henry Sutton.

The Republican ward primaries of this city and county will be held on Monday night next. The precinct conventions are called to be held in this city on Wednesday at 8 p. m., and for the precincts of the county outside of the city at 10 a. m. Wednesday, with Murray as the place of meeting.

The Utah Democratic club will meet at the office of James H. Moyle tomorrow night at 8 o'clock.

PRECIOUS STONES.

SOMETHING ABOUT THE GEMS FOUND IN THIS COUNTRY.

[Washington Post.]

In speaking of the occurrence of precious stones in this country Mr. Kunz said: "Although nearly all known varieties of precious stones are found in the United States there has until recently been little effort made to search for them on an extensive and systematic scale, the indications usually not promising a sufficient return for any great outlay of capital. But there has lately been advance in this direction, for, whereas in 1889 mining for gems was carried on in only two states, there were mined during the last year the following precious stones: Tourmaline in Maine, emerald in North Carolina, turquoise in New Mexico, sapphires in Montana, and opals in Washington, Idaho and Oregon.

"Nearly all of the gems secured by the various methods of mining are either sent to the large cities in small parcels to be sold, sold as souvenirs where they are found or sent to other localities to be sold as having been found where they are sold.

"Diamonds are found scattered over the country, but up to date never in commercial paying quantities. The two chief diamond beds are along the southern base of the Alleghanies from Virginia to Georgia, and along the western base of the Cascade and Sierra Madre mountains in northern California. There have also been unconfirmed reports of scattered gems found in other localities, and within a year or two considerable excitement was created by the reported occurrence in central Kentucky of mineral born closely resembling the diamond bearing earth of the African mines. But it was afterwards found that there were important differences between this deposit and the Kimberly clay, the most vital of which was that the Kentucky stuff bore no diamonds.

"Sapphires are found chiefly among the crystalline rocks along the base of the Appalachian mountains from Chester, Mass., to southern Georgia. The largest corundum crystal ever found, which was five times larger than any other known crystal, is now in the collection of Amherst college. It suffered somewhat in the disastrous fire of 1892.

"During the last two years turquoise has been actively mined for by two companies, the American Turquoise company and the Azure Turquoise company, a few hundred attempts by others having been made. The first of the two above named companies engaged in mining six miles from Cerrillos, N. Mex., requiring some of the mines originally worked by the Indians, and have found turquoise equal in color to the finest Persian material. Its stability in retaining color is equally good, and changing within a short time, as does the egg shell turquoise, which was so extensively passed off on the market about the time when the Persian mines were coming to yield.

"Stones have been found at these new localities weighing up to sixty carats each, one of which was sold for about $1,000, and it is now possible for the first time in the last half century to match a perfect turquoise necklace.

"The Azure turquoise mines are in Grant county, N. M. The material is of rather a robin's egg blue, that is, with a faint greenish tinge. The stones are not the sky blue of the more northern locality, but is maintained by the owners at the mine that they are not subject to change of color.

"Turquoises have always been known as an unstable gem. Even the finest Persian stones are liable to change occasionally with scarcely any warning, the alteration probably being due to the turquoise coming in contact with acid exhalations from the skin or with fatty acids or alkalies in soap, although women of turquoise are especially warned against wearing their rings while washing their hands. Recent observations also indicate that turquoise is liable to injury from perfumes. The sale of turquoise during the year 1891 from these two localities has probably exceeded $100,000, and for 1892 $175,000, and a greater amount for 1893 is expected, so quantities of this gem from an American market have been sold abroad for the first time. This gem has given the most curious evidence of gem mining in the United States.

"Garnets are also found throughout nearly the same region as the turquoise. One of their peculiarities is that the most of them are ready mined for the prospector, who find them dug out among the soft hills and surplus houses. They are collected by the Indians and sold to and to the Indian traders. They are the superior in some respects to the "Cape rubies" that are found in mining for diamonds in South Africa. Some of the exceptionally fine ones have brought $50 to $100, though fine specimens stones seldom bring over $5. The garnet output from this region amounts to about $5,000 to cut stones annually.

"Opals and amethysts are the two other precious stones of the greatest importance in this country. The new opal beds in Oregon, where $20,000 worth of the gems is reported to have been obtained in 1892, promise, if properly worked, to be one of the most important of our gem deposits from a financial point of view."

LIST OF LETTERS.

Remaining uncalled for in the Post office at Salt Lake City, Utah, on Sept. 21, 1894. In asking any of these letters the applicant must call for "Advertised Letters," and give the date of list, 14th. If not called for within two weeks they will be sent to the Dead Letter office at Washington, D. C.

LADIES' LIST.

Baker Mrs M	Lafferty Augusta
Bennett Mrs M L	Lowe Lizzie
Bice Mrs A	Mann Anna
Bond Mrs Ida	Merrill Hannah
Christensen Lizzie	Nelson Maggie
Christensen E L	Nutbrown Anna
Clapson Mrs Alice	Ro Young Lizzie
Cooke Miss Zurna	Sayers Mrs Gertrude
Cowan Mrs J F	Swinyard Pauline
Cowley Mrs J C	Thomson Mary E L
Dalton Mrs	Thomson Mrs J A
Dunbar Ada	Wade Jessie
Andrews Maude	

GENTLEMEN'S LIST.

Anderson W	Hutchins J H	Wee Charles
Bacon J	Hudson J A	Wilson J
Brown J H	Hance F	Patterson A
Brown J W	Hanks A G S	Pickard J M
Banks W M	Hoffmann L	Perry Joe A
Butler J	Hagerty	Pete—only name
Bauer G E	Hoover G F	Powell G F
Baldwin C	Hunnebeck A	Rasmussen H
Black G	Jones G	Sing Jack
Cowley H D	Jones J A	Schultz John
Dalton R S	Jennings E	Stout W C
Dalton J L	Johnson A	Thomas Ab Gad
Burton H C	Johnson J	Jack
Carpenter J	Kinder W	Barney J M
Calloway A	Lindsley J	Bunn Jesse
Clark W M	Scott G H	Anderson Jas A
Cook G	Lee Lorenzo	Dunbarry W S
Cullen T	Farrell	Jones C E
Craig C G	Lakes M J	Jones E O
Cummings M	Mills John	Jones W H
Crane J	Ross King	Swensen G L
Cannon G W	Rickel M	Snyder A G
Cline F A	Ridge Harry C	Schaver J J
Day Joe J	Stoddard F	Spaulding J S
Kenyon Cpt	Sims John	Taylor Geo K
Leighton G	Mommsen Sig	Thomas J L
Fox M A	A S	Trudy Geo
French A	Morgan Dan C	Tyler J A
Gillispie W	Moore G H	Turner W W
Gross E H	Morton Harry	Dan S National
Gore National Co	Barnes John	A Good Co
	Moore J W	Cyber Lake
Goodhead S H	Neser T P	West Alfred
Gray F G	Nelson Geo G	White H
Gray H W	Nelson H C	Wood A M
Gordon F C	Nicholson M	Wood James
Green A B	Nelson Hugh	Wolf Walter
Hoag O H	Nicoughton	Young H B
Hamer J A		Co

A. H. NAIL, Postmaster.

COMMERCIAL.

SALT LAKE CLEARING HOUSE.

Today's clearing house exchanges amounted to $610,736. Same day last year, $115,119.

TODAY'S QUOTATIONS.

New York.—Silver, 65½; lead, $3.55. London.—Silver, 29½.

ORE AND BULLION.

T. R. Jones & Co. received today: Bullion, $5,473; ores, $9,563. Total, $15,036.

Wells, Fargo & Co. received today: Ores, bullion, $4,410.

McCornick & Co. received today: Silver and lead ores, $5,705; Hanauer bullion, $4,195. Total, $7,900.

REAL ESTATE.

Transfers filed in the office of the County Recorder of Salt Lake, for Sept. 20, 1894.

Consideration.

E. W. Lane et al. to Jennie E. Charlie F. Lambert, part of lot 1, block 3, plat E, city ..... $ 200 00

Charles Barnes et ux to Albert Anderson, lots in Irving Park Addition 1 00

John H. Thompson to James Anderson, lot in Irving Park addition 150 00

Sophie T. Sprague to Ruth T. Harvey, part of lot 7, block 31, plat B, city 1 00

W. A. Black to D. F. Parsons, lots 11 and 12, block 3, to Long's second addition ....

STOCKS AND MARKETS.

NEW YORK STOCKS.

New York, Sept. 21, noon.

Money	3	Pacific mail	33
Ex sterling	4 85	Denver & R G	
Canada Pac	75	Union Pacific	18
Adams	155	St. Paul common	70
Barlington	74	Preferred	121
Delaw Lack	135	Great Northern	
Northern Pacific	17	Preferred	80
Preferred	35	Texas Pacific	5½
Reading	5 15/16	Union Pacific	41
Preferred	16	Pacific Express	73
North American	4½	Western Union	90½
New Jersey Central	12	Sugar	85½
Ont. Ecquitable	11		

SILVER.—Bid, 65½.

CHICAGO MARKET.

CHICAGO, Sept. 21.

Wheat—Sept	Sept.	Oct.	Dec.
Corn—Sept	Sept.	Oct.	Dec.
Oats—Sept	Sept.	Oct.	Dec.
Pork—Sept	Sept.	Oct.	Dec.
Lard—Sept	Sept.	Oct.	Dec.
Ribs—Sept	Sept.	Oct.	Dec.

Cash quotations were as follows:

Flour—Steady.

Wheat—No. 2 spring, 61c; No. 3 spring, 57c; No. 2 red, 61c.

Corn—No. 2, 41c.

Oats—No. 2, 19c.

Pork, Lard and Ribs—Nominally unchanged.

BIRTHS.

WADE—Yesterday, to the wife of W. Wade, a son. Thirteenth ward. In the city. Mother and child are doing well.

Dr. Price's Cream Baking Powder
World's Fair Highest Medal and Diploma.

A Handsome Complexion
Results to the greatest charm a woman can possess. Pozzoni's Complexion Powder gives it.

H. B. WINDSOR & CO.,
General Insurance,
Royal Exchange. Milwaukee Mechanics. Hartford Steam Boiler. Fidelity and Casualty Co's.
406 and 407 Progress Building.

DESERET EVENING NEWS..

Advertise In It!
Subscribe For It!

Read It!

And know what your Town, Territory Nation and the World are doing day by day.

Friend of Home Industries!
Friend of the People!
Clean, Reliable, Fearless!
Latest and Straightest Telegraphic and Local News!
Best and Brightest Special Correspondence!

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OF LATTER-DAY SAINT

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FOR A FEW CENTS ANY PERSON CAN OBTAIN A SUPPLY TO SEND ABROAD TO FRIENDS, AND THESE SILENT MESSENGERS FREQUENTLY PREACH THE GOSPEL AS EFFECTUALLY AS MISSIONARIES. TRY IT BY BUYING SOME AND MAILING TO YOUR FRIENDS ABROAD.

R. K. THOMAS,
26, 28, 30, 32, East First South Street,
Salt Lake City.

Special September Announcemnnt.

WE ARE NOT LOOKING FOR PROFITS, WHAT WE WANT IS VOLUME OF BUSINESS.

We shall offer some Tremendous Bargains to effect this object. We shall show a thousand or two.

JACKETS,
CAPES AND
WRAPS,

At about one half their value, ranging from Ten to Ten Dollars. We don't want a Wrap left by November First. We want increased room for our Dry Goods Department, so will close out our Entire Stock of

LADIES,' MEN'S AND CHILDREN'S SHOES.

You'll all want Shoes for winter, and now is the time to get about two pairs for the price of one. You should not wait until sizes are broken, but call early. Mail orders can be filled by giving size.

SILKS.

About Ten Thousand Dollars worth will be thrown on our counters, at prices that all can afford a Silk Dress. We are showing about Five Hundred Pieces.

New Dress • Goods,

Which will sell at not much more than half of last fall's prices. We shall offer Fifty Thousand Dollars worth of

RIBBONS,
LACES,
HOSIERY,
GLOVES,
TOWELS,
SHAWLS,
FASCINATORS,
UNDERWEAR,
SHIRTS,
TIES,
WINDSORS
HANDKERCHIEFS,

And Family Supplies Generally in this sale, all at Cut Prices, as we are determined to close them before January stocktaking. We don't want to have it a few weeks before then when people have been supplied, but the Knife goes in at the very commencement of the season. You'll all want less for your money this fall. It will be given you at our

Reliable Establishment.

This is a bid for your business, and the One Hundred Thousand Dollars worth of goods we expect to move between now and Christmas, will save to the customer fully Thirty-five Thousand Dollars.

REMEMBER the Three Great Specialties,

SILKS.
SHOES.
CLOAKS.

R. K. THOMAS.