

tomatoes, potatoes, squash, beans and cucumber vines, and greatly injured corn. In Weber county most of the corn has been already saved without damage.

The ripening of sugar beets has been delayed about two weeks, and the ground has been too wet to dig them. The drying of fruit has been much hindered.

Wheat has yielded in Salt Lake county about twenty to twenty-five bushels per acre. The sowing of fall wheat has begun in Davis and Salt Lake counties, the ground being in good condition.

Snowville—Threshing through; yield fair. Frost killed squashes and corn.

Plymouth—Alfalfa seed being threshed; yield from poor to good.

Box Elder—Corn ripe, crop good; cutting begun. Frost 13th; no damage.

Yost—Grain all harvested and ready for threshing; crop A 1.

Newton—On the 12th a high wind tore up stacks and broke off shade trees.

Randolph—Snow on 13th, retarding hauling of grain. Very stormy.

Croyden—Frost cut potatoes down to ground, and also killed corn.

Peterson—Storms have delayed stacking, and very little threshing yet.

Pesa—Snow on morning of 13th. Some grain is sprouting owing to the wet.

Huntsville—Frost on 15th, 16th, 17th. Threshing commenced a little.

Harrisville—Threshing finished this week. Corn mostly cut; good yield.

Uintah—Ground in good order for plowing. No injury from frost so far.

Kaysville—High winds damaged fruit greatly. Some injury from frost. Wheat planting just commenced.

Gale—Beets have been thrown back two weeks in ripening on account of the storm.

Herriman—Good time for putting in fall grain, which the farmers are taking advantage of.

Center—Snow on the mountains on 13th. Severe frost on 14th; ice $\frac{1}{4}$ inch thick.

Lake Shore—Two nights of heavy frost have killed vines of potatoes, squash and beans. Beets look well; none dug yet. Some grain stacks wet through.

Payson—Tomatoes and tender vines were wilted by frost of 13th. Too wet to dig beets and potatoes. Now hauling corn.

Levan—Frost on mornings of 13th and 14th killing cucumber, bean and tomato vines. Fine days, favorable for out-door work. Another week will finish threshing. Women and children now drying fruit.

Moroni—Harvest over except a few acres where ground too soft. Heavy frost 13th killing potato vines and other tender plants.

Oak Creek—On 12th heavy wind damaged fruit considerably. Vines of tomatoes, squash and beans were frozen on the 12th and 13th.

Richfield—Frosts on 14th and 15th killed vegetables. Harvesting most done, yield good.

Monroe—Cold, bleak wind from the north, freezing almost everything. Considerable ripe corn, but the most was killed before ripe.

Calneville—Looked for frost on 6th,

but it turned off to rain. Corn and cane ripe; molasses making in full blast. Crops are good.

Kooshareu—Killing frost on 14th; much grain and lucern frozen. The drop in temperature was very sudden and unexpected.

Pinto—Rain on 6th and 7th. Some corn is ripening now; crop good. Late heavy rains will be a great benefit to the ranges. Small grain cut; farmers busy stacking.

Layton—Weather has turned warm again. There is a very good crop of everything this year. Cane is being made into molasses.

DID TOLTECS MAKE COAL.

[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 stone castles and watch towers. Far 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 northwest of Florence lie ruins far more extensive and of far greater interest to the exploring archaeologist. The locality of these ruins may be more clearly stated as in the vicinity of Tempe, about twelve miles from Phoenix, Arizona's capital city. Here it was that Frank Hamilton Cushing, heading the Hemingway archaeological expedition, delved so long and with such material benefit to the cause of historical science.

Los Muertos, the "City of the Dead," wherein the researches of the Hemingway expedition were mainly prosecuted, lies seven miles to the southward of Tempe. Within a dense forest of giant mesquite trees that had grown upon its site the evidences of the city lay 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 gently sloping land, there is yet prominent at the city's center a vast ruin of what was in the dim 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 smaller neighbor, the Gila, irrigating the lands that the husbandman of the nineteenth century again tills and, apparently, by much the same methods.

From the pictographic 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 conjecture mainly guides 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, which 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 granitic-country rock for fully a mile.

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

The olla 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 brick-red color, showed the effect of intense heat. The olla 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 sustains every test of the assayer. It was found closely packed, though far from solid, and regularly stratified, as though in a true coal blanket. In a straight line to the southeast, paralleling at a short distance the course of an ancient canal, bits of coal were found strewn upon the ground, and, following this "lead," five other ollas 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 pits.

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 fact, if the writer be not decidedly mistaken, this "potted coal" of the