THE DESERET NEWS COMPANY

Inors, the most precious of all metals, because the most useful, is tical, and go down into the earth like bug walls." in arrow gauge railway is already completed from the Utab Southern is bould crusted in quality of the same manner of the same manner of the same manner of the same of the same manner of the stage of Utab's history and bout equally divided in quality is the same of the same of the same strong in the character of the ore, though it is mense quantities, surrounded by come hemalic and magnetite. Some of the beds of both are exceedingly dense and compact, while the are necessary to its successful manufacture. That it will yet become a source of great wealth to the ore is apparently very important auxiliary toward to the favored few whol is done of the manner of the wast to the favored few whol is great to the and to foreign minet of the favored few whol is guest of tors, though showing with an any millions of tons of the proposed location of works there and compact, interview contains a large quantity of silts. The same stature, dark, intel- or apparently guile pure, is already guest and targe areas of timber and compacts. Some of the beds of the proposed location of works there and compact while the manner is source of great wealth to be availed to the ore is apparently very important auxiliary toward to a source of great way the the same of the same of the proposed location of works there and compacts, while the manner is an apprentity of silts. The importance is one of the same of the same source of the same of the same source of the same of the same source of the same source of the same source of the same source of great way is already guest and one of the same source of great waster. The same source of the same source of great waster is the same source of great waster is already the same source of the same source of great waster is already the same source of the same source of great waster is an apprenting to draw attention to the same source of the same source is apparently guile great and one metals, because the most useful, is like huge walls."

the following from a practical min-ing engineer, who is familiar with the metal from its native state in ore decosits through all the stages of its manufacture into the great aid to civilization and the develop-ment of many other of earth's re-sources. This being a matter of public interest, we surrender much of our space to-day to this communi-cation, expecting that others will fol-low from the same able source upon the same important subject. In the progress and development of science there is no branch of man-ufacturing industry so marked for

ufacturing industry so marked for

berations of a people practicing in the chase with the primeval bow district. and arrow. In the dim distance we can just discern the old Aryan fashioning his spear of iron, converted into the metallic condition in a rude way, still existing amongst the

hills of Hindostan. According to the Pentateuch, the discovery of iron is attributed to Tubal Cain, who is said to have been the sixth in descent from Adam; other traditions assign the discovery to Vulcan. The exact date or locality of its origin is of no great impor-tance, at the same time there can be the simplest of all metallurgical where the principal crest of the hill is a distinct sheet of stratified, reguoperations.

EVENING NEWS. THE PRINTED AND PUBLISHED BY PUBLISHED separated by very short intervals, as climatic influences are conducive to the outcrops occur within a stone's physical and intellectual developbrow of each other, and the surface ment. This locality would be dis is everywhere strewed with blocks tant from the Sanpete and Castle of rich magnetic ore, enough in Valley coal mines about 100 miles,

number of distinct and closely ap-proximated belts, which are the out-tains in Iron County about 166 miles. physicians. IRON. The most precious of all metals, because the most useful, is proting down into the earth like huge walls."

great distance the soil is covered absence or presence of this quality ufacturing industry so marked for extension in the future as the manu-facture of iron. Its origin is perhap: co-equal with that of the human race, whose his-tory traced back a few centuries of mortal time, is lost in traditions and myths; and there comes to us rever-berations of a people practicing in

step is generally the construction of a blast furnace for the production of "As to the age of this remarkable series of iron ore deposits, I cannot speak with absolute certainty, though they are apparently Lower proximate the cost of construction and production: Silurian."

The granite of the hills which (1) A furnace to possess a capacity f producing 30 tons of pig-iron per 30 ours, built of stone and fire-proo contain the iron is finer grained and less compact than that which forms of produc the great granite axis of the Wasngine and bouler house and hot bla atch, and I suspect is the metamor-phic condition of the quartzite beds which rest upon the Wasatch gran-[2] Steam engine and blowing on gine, capacity for two furnaces, steam bollers, castings for hot blast over and all other purposes, pumps, etc., and all other purposes, pumps, etc., ite. Some of the iron ore beds in this granite are distinctly interstra-(3) Charcoal kins or coke ove no doubt of its discovery at a very early period, as the production of wrought or malicable iron is one of the second sec

r the WASHINGTON, D. C., 2.-Execu-tive Mansion, 8.30 a. m.-The Pre-sident passed a very pleasant night This will be acc Commons. This view of the situa among the memb house last night.

Lord Edmund the exclusion

on the

The Herald's London dispatch has the following account of the

The probability is that they will in

of Parnell in the Heuse of Commens: Mr. Justin McCarthy called attention to the impris-Land Leaguers, asking for an oppor-tunity to present their case in Par-liament. Mr. Gladstone replied, after some delay, that the Irish members would have ample oppor-

PEORIA, Ill., 2 .- A reporter who tunity to discuss arrests on the interviewed Crowe, the Gasoline mate, This reply annoyed Lamp Contractor here, who is con-nected with the infernal machine nounced the conduct of matter in Peoria, says he has al- ministry in continuing to hold ways been the head of the Fenian in prison men who were the true agitation here and Crowe is one of authors of the land bill, while at the agitation here and Crowe is one of the most desperate agitators. He is a man of small stature, dark, intel-lectual countenance, and talked composedly as any one on ordinary topics. Crowe, produced a letter from George Holgate, dated Phila-delphia, August 31st, 1880, setting forth that Mr. Holgate owned the McClintock torpedo boat which

McClintock torpedo boat which did such terrible execution during the rebellion and that he had been language, but Mr. Parnell went on the rebellion and that he had been d conducting experiments with it under water which caused Mc-Clintock to lose his life and that be had refused a proposition from Spain for the boat. He claims that the boat would blow up any vessel in the British fleet, and could blockade any fort regardless of all the men-of-war in the world. It would cost about \$20,000 to build it and he would place it at Crowe's disposal. He claimed that the boat would de more good for Ireland and fetch the British government to terms quicker than half a million men. Crow said that shortly after the executive committee of

after the executive committee of the assassin. Her accomplices have United Irishmen met in New York, been arrested, but she herself es-United Irishmen met in New York,
Judge Brennan, of Iowa, Capt. G.
Sherman, of New York, Jos. Kenfir,
of Providence, Thos. H. Dwyer, of
Chicago, O'Donovan Rossa and him self were present. They discussed
Holgate's proposition and the means
f of devastating England's shores,
but on Crowe's representations they
decided that it would be more expensive, and they could do better

decided that it would be more ex-pensive, and they could do better work by depositing torpedoes in the British ships, which could be done for \$25 apiece, and which would bring England to terms by making

it dangerous for people to go on board British vessels. They deparents respectfully invited.

cided to adopt that course. Some At the residence of Dr. H. D. Fisher, Third time later the United Irishman and East Street, between Second and Third South Fenians joined hands in order to ex- Streets, Salt Lake City, August 2nd, 1881, at

Fentians joined hands in order to ex-ecute these plans. They were 6,000 strong in the United States and Canada. There were branches in Toronto, Quebec, and near-ly every important city in the Uni-ted States. These infernal machines are being made in every city where there is a branch of the order and Evends of the contex and states are defined in every city where there is a branch of the order and Evends of the contex and states are defined in every city where there is a branch of the order and



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we find no traces of progress in its manufactore worth note, or any en-during divance towards a higher civilization until the advent of the "Iron age" amongst the English speaking people, which cannot be traced back with any certainty to an earlier period than the fifteenth

century. Iron may be said to occupy the rank amongst metals, that oxygen does in the gases, and although not so universally diffused throughout nature, it exists in great abun-

dance. Within the area comprising the United States of North America, there are already established four great iron-producing centres, name-ly, Pennsylvania, Lake Superior, Michigan, Missouri and Teonessee, and there seems no good reason why Utah will not, ere long, rank as the fifth great iron -producing centre on the continent.

The extent, character and rapid development of the mineral resour-ces of the Territory, up to the pre-sent time ought to forbid the idea sent time ought to forbid the idea that the foregoing statement is either Utopian or visionary in its character, it is simply an event which is likely to transpire, as a matter of course.

The quantities of iron ore in Utah and coals suited for its conver-ion into all grades of iron amployed ficient fuel and suited to use in sion into all grades of iron employed in manufacturing or commercial A. P. Bouton, M. E., reporting on the coal veins of Sampete Valley, says, "The coal is of a dark brown this subject by Col. A. W. Hamitton, when he says: "The iron de-posits of Utah are measured by mountains and the coal measures by counties; in short the supplies are inexhaustible, and embrace all increasing the supplies are variables."

varieties." Dr. John S. Newberry, of the School of Mines, of New York, writing on the iron mines in Iron County, pronounces them"the most County, pronounces them the most County, pronounces them"the most remarkable deposit of iron ore yet discovered on this Continent," and that "there is no evidence that any other great deposit of iron exists in or beyond the Rocky Mountains." The following contribution from his able pen to the "School of Mines County" may be of interest. follows:

able pen to the "School of Mines Quarterly" may be of interest. "During the past summer, which I spent chieffy in Utah, I visited the deposit of crystaline iron ore of Iron County, in the southern part of the Territory. These ore beds have been long known and were to some

been long known and were to some extent quilized by the Mormons in their first advent, thirty years ago, but no satisfactory description of them has ever been published. As they constitute, perhaps, the most remarkable deposit of iron ore yet discovered on this continent, I have thought some facts in regard to them might not be an unimportant addi-tion to what is known of the econo-mile resources of our country. The iron region referred to lies nearly 300 miles directly south from Salt Lake City, and is situated in what is real-ly the southern prolongation of the subordinate range, which attains its greatest height in Pine Valiey Mountain, near Silver Reef. Thirty miles north of this point the ridge breaks down into a series of thing yets and masses of trachyte and here and there outcrops of highly metamor-phosed limestone. The ore beds form a series of protruding crests and masses set over an area about ifficem miles iong in a northeast This coal by distillation makes an extent quilized by the Mormons in

From all sources of information larly bedded magnetite, from 30 to 40 feet in thickness, dipping toward the north at an angle of about 80 degrees. Parallel with this principal Cost of making one ton of charcoal layer are other sheets of magnetite pig-iron at the proposed works from ores obtained in Iron County and separated by strata of granite, and varying from a quarter of an inch to 10 feet in thickness, as perfectly par-allel and regular as any series of sedimentary beds ever seen." On the whole, the Blair mine is the most interesting and instructive contarts of laser how and mixtures from Tintic:

Two tons of iron ore at \$5 per ton, One hundred and twenty-five bush-els of charcoal at 121-2 cents () bushel, Limestone for flux, Cost of making, States lost of making, outcrop of iron known to me, and furnishes the most striking proof of the sedimentary origin of these wonderful ore beds." Other deposits of iron ore exist in various parties of the Torritory the Total cost per ton of product,

various parts of the Territory; the most extensive known to us are found in Tintic and Columbia mining districts, and are believed to be chiefly if not altogether hematites, have been used so far as fluxes in lead smelting. The iron ores of Tin-tic are said to contain small values n gold and silver, which may account for their present extensive use

2,000 pounds of iron ore would be re-quired to produce one ton of 2,240 ed the charge. The charge consists pounds of pig-iron. quired to produce one ton of 2,210 pounds of pig-iron. The cost of the ore, as per exhibit, would allow for railroad transporta-tion at the rate of one and two-third cents per ton per mile, and leave a balance of \$2.55 per ton for mining and value of ore. By the erection of charcoal kilns

highly inflammable, some of them

tor some time within the estimated cost. Charcoal and good coke pos-sess in general equivalents in car-bon, or what is classically termed "calorific effect," while the Utah coke no doubt possesses the quality of "carrying burden" equal to the charcoal of the country. Exact data bearing upon the cost A. P. Bouton, M. E., reporting on Exact data bearing upon the cost of production of coke from Utah coal is not at hand. Coal could be deli-who would use them quite freely.

increasing the per centage of ash. These mineral salts must of necessisered at the works of \$5 per ton, and, as before shown, it would re-quire two tons of coal to produce one ton of coke, it would be safe to estimate the cost of come fuel per ton of pig-iron produced at the same rate as charcoal, Cleveland, Ohio, is a large centre Crowe has an easy, dignified

Bitumen, Coke, exclusive of ash, Asb, Total,

PEORIA, Ills., 2.—Of the 18 persons injured by the exposition of Wool-ner's distillery, 10 have died and five will doubtless die. They all inhaled hot steam, and their sufferings were terrible.

some time to come. The rapid growth of the iron in-dustry in the United States is strik-ingly illustrated by the development of the Lake Superior Iron District. Thirty years ago it was an unbroken FOREIGN. The Land Bill. LONDON, 2.—Deep interest was manifested last night in the second reading of the land bill in the House wilderness, and its mineral resources the shown only to a few hardy ploneer explorers; in the year 1880 its iron product aggregated 1,875,902 tons of iron ore, and 48,000 tons of pig-iron. During this brief epoch mines have been developed yielding an unusual product of 100,000 tons of ore, cities t may heen built, numbering their wilderness, and its mineral resources

n of the order and | Fr ds of the orphans and of will continue to be made. They are Fisher are invited to attend. working for the good of the old sod. In the 8th Ward, Salt Lake City, August 1st, 1881, of inflammation of the brain, ARand they were no more liable than

are makers of revolvers and cannon. are makers of revolvers and cannon. Dynamite was no more vi-cious than powder, and with these weapons they could drive from the seas their enemy, destroy her trade and make profitable busi-ness impossible. Some people would have to die. This would be worse than Boycotting, but war was al-ways cruel and that war was easiest which went straightest to the mark, killed the most in the shortest time and cempelled nations to make

The iron ores of Iron County be-long to the two great divisions of mineral, namely magnetic iron ore or, magnetite and hematite, of which there are many subdivisions. When CAOHE VALLEY STOVES, NOTIONS, there are many subdivisions. When comparatively pure, both classes yield from 60 to 70 per cent of iron. Making allowance for impurities and loss in reduction, the average of 56 per cent. is calculated upon as a standard. In this ratio, two tons of Secure Your Tickets at Dwyer's and Raybould's book stores, and at the Depot to-

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Tie Choppers, Rockmon and Team stors to labor on Railroad at San Francisco Mountaine, Arizona.

By the erection of charcoal kilns this class of fuel could be supplied for some time within the estimated If she did not do justice to Ireland, Highest prices paid for men to Chop Ties, Blast Rock and drive Teams on the Atlantic and Pacific Railroad. Brothren residing in the extreme Southern settlements of this Territory, are less than 300 miles from A. and P. R. R. lines, and will find it most conve-nient to cross the country vise Les's Ferry. Those who desire to go by Railroad, via Den-ver, can obtain special rates over Railroads by applying to LeGrande Young.

morrow morning.

ERASTUS SNOW, BRIGHAM YOUNG, JNO. W. YOUNG, JESSE N. SMITE. da&wtf

MRS. M. E. RANDALL'S Select School will open its fifth scholastic year on Mon-day, August 29, 1881. Connected with the school is a boarding department, in which a United number of pupils can be accommo-

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lorgan College, 14th Ward, S. L. City. ds Im

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of terrorism begun; he claims that there are many of these dread

varied forms of merchantable wronght iron and steel; and in view of the many railroad enterprises, in prosecution and projection in Utah,

a works for the production of steel rails and railroad materials might find remunerative employment for

Cleveland, Ohio, is a large centre for the sale of pig-iron. By reference to the price current for the present time. No.1 charcoal pig-iron is sold or \$32 per ton, the exhibited cost of the production of an equal quality of iron in Central Utah. The cost of transportation of the article from the east, or of Scotch pig-iron from the west would approximate \$20 per ton, and would represent the net profit or

\$88,000

\$120,000

15.62 1-2 37 1-2 5.00 1.00

\$32.00

54,000

Total cost of constructions

Total capital employed,

Working capital

