

es new mines and new mining interests will, without doubt, be opened and developed; and as a result of the labors of developing the resources of the Territory I realize that millions will be benefitted.

There is one thing that our friends do not realize. When they come here they make up their minds that "Mormonism" is a humbug, and their mistake is, it is true. Joseph Smith was a prophet of God, and the plan of salvation revealed through him is the gospel of Jesus Christ; and every man and every woman that rejects it, rejects the truth and will be responsible for it; and every man and every woman that walks in obedience to its precepts will receive glory, honor, immortality and endless lives. I am not talking something I guess, I know these things are true; and it is the wisdom and prudence, the light and the intelligence of the Almighty, revealed through his servants to the Latter-day Saints that have gathered a hundred thousand people from the four quarters of the earth and planted them down in comfortable homes in Utah; and it is only the inspiration of the father of lies that circulates the false reports and the abuse concerning them.

May God bless you my friends! You are welcome in this land. Go and be blessed; and as you go to your homes, to the four winds of heaven, tell the truth about the Latter-day Saints. May God enable us to overcome and be faithful in all things, that we may finally inherit his kingdom, through Jesus our Redeemer, Amen.

## EDITORIALS.

THE Monthly Report of the Department of Agriculture, for March and April, is to hand. It contains statements from various parts of the Union of the condition of winter grain, condition of cattle, sheep, and farm animals, diseases of the same, entomological record, chemical and scientific notes, facts from various sources, market prices of farm products, etc.

In "First Words of the Botanist," that gentleman, Mr. George Vasey, states that he has just entered upon his duties. The botanical collections of the Department are distributed in cases and on shelves numbering 1 to 200, corresponding to the natural orders. Large quantities of specimens yet remain in packages, awaiting examination and distribution. The collection contains the botanical collections of the different exploring expeditions of the government, together with numerous private collections which have found their way to the Department. The botanist says a representative of every species of plant growing in the United States, and, as far as practicable, of the plants of other countries, should have a place in the Department collection. It is also desirable to have a more complete representation of all our native forest trees, in the form of sections of the trunk or body of the trees, so as to illustrate the natural appearance of the bark and the wood, also a section of the wood polished, to show the quality of the grain. This feature of the work would also have a practical bearing upon the important questions now agitating the public mind—the preservation and perpetuation of the forests of the country. "Another object of great importance to the country is the diffusion of information respecting the vegetable or fungoid diseases which affect many of our most valuable agricultural products. Our grains, our orchards, and vineyards in many localities are suffering from the ravages of blight, mildew, mold, rot, or other fungous parasites. These require investigation, in the expectation that a full knowledge of their nature and habits of growth will enable us to discover means of arresting and controlling their progress."

In the Scientific notes is one of a very important announcement lately made in France concerning the effect produced upon the luxuriance of vegetation by the disturbance of the natural position of the branches. In addition to the knowledge, acquired some time since, that if one of two branches of a fruit tree of similar size and upward inclination is bent downward toward the horizontal plane, the bent branch appears to lose its vigor, while the other gains in a like ratio. It is now announced, as the discovery of one Hooibrek, a Danubian peasant, that this law holds good only to the horizontal position, but that if the branch is depressed still lower it acquires greater vigor than before, and will put out leaves and branches to an unheard-of degree, though this depends upon keeping the branches as nearly as possible in a straight line, the effect being measurably lost with a considerable curvature, as in this latter case only the buds which occupy the top of the arc are

developed completely, at the expense of the rest, which remain in their original condition, contributing neither to the extension of foliage nor of fruit.

The following extracts will be acceptable to all who are interested in the subjects upon which they treat:—

**CARBOLIC ACID AS A DISINFECTANT.**—C. Homburg, of Berlin, proposes to use carbolic acid as a disinfectant, by saturating sheets of Bristol-board, or any thick spongy paper, with a solution of carbolic acid in water. The paper, in pieces of any convenient size, may be hung up in the room to be disinfected, or may be placed in drawers or wardrobes, where it is desired to protect clothing from moths or other insects. This suggests a convenient method of using this excellent disinfectant and insect destroyer.

**USE OF SEWER-WATER AS A MANURE.**—According to the *Revue Horticole*, experiments with the sewer-water of Paris, in the cultivation of certain lands below the level of the city, commenced three years ago, have been of the most satisfactory character, and the eagerness that the farmers now exhibit to obtain permission to use these waters on their lands, wherever it is practicable, is justified by the great increase in their value, many of them having previously been of little worth. Thus certain lands now rent for six or seven times as much per annum as formerly.

**ARTIFICIAL WATER-LIME.**—It has been long known to chemists that water-lime consists substantially of quick-lime, burnt clay, and a small portion of the oxides of iron and magnesia, but scarcely any effort has been made to utilize this knowledge. All yellow or red clays contain iron, and most specimens of lime in use contain the required magnesia. If burnt clay or brick-dust in fine powder be mixed with an equal weight of fresh slaked lime and twice this weight of clean sharp sand be added, a compound will be formed which will harden under water equal to the best hydraulic cement.

**MILK OF DISEASED CATTLE.**—Mr. Husson, in a paper upon the milk of animals diseased with the cattle plague, announces, as the result of one of his researches, that neither the flesh nor the milk of animals suffering from this cattle plague—contagious typhus—will convey the disease, although they may suffer greatly in their nutritive properties. The milk of diseased cows he found to have a more or less marked reddish-yellow tinge, and a disagreeable flavor, although cats fed upon it seemed to suffer no inconvenience.

As general conclusions, Mr. Husson remarks: First, that when the typhus breaks out in a cow-house, all the beasts therein are subjected, although in different degrees, to the epidemic influence. In fact, in one instance the whole herd died, with the exception of four cows, which never seemed to be ill, although they furnished one of the three specimens of milk analyzed. Second, milk cannot, any more than flesh, transmit the disease to man, nor to animals that do not belong to the ruminant family. Third, notwithstanding this, even during the first stage of the disease, when the yield still continues normal, the milk should not be employed as food for young children, in consequence of the modification that has taken place in its principles. Fourth, from the commencement of the disease, the combustible elements of the milk, in great part, disappear, while the azotized elements, on the contrary, are increased in considerable proportions, and are soon found commingled with sanguinolent matters. Frequently there may be observed under the microscope, agglutinated globules, either mucous or purulent.

**WIRE-FENCES IN TEXAS.**—Mr. R. E. Talbot, Georgetown, Williamson county, Texas, describes a new wire-fence which has been extensively introduced into that section, which, it is claimed, can be built for less than \$1.25 per rod. It has been fully tested by wild Texas cattle, and is perfectly hog-proof. It consists of eight wires, No. 9 size, passing through cedar posts a rod apart. The lower four wires are six inches apart, and the others nine inches. This will give a five foot fence. Between the posts weave in three sawed or split pickets, which should not reach the ground. Staple the wires to the pickets.

**REGULATING THE HATCHING OF SILK WORM EGGS.**—Duclaux, after a careful observation of the external conditions which favor and influence the hatching of the eggs of silk-worms, has

prepared the following rules, by attention to which it is said that the development of the eggs can be regulated at will. First, to prevent an egg from being hatched at the usual time, it must be kept, from the period of being laid, at a temperature between 59° and 68° F., and then exposed fourteen days to cold, three months before the time at which the hatching is desired, being subsequently treated in the usual manner. To cause an egg to hatch before the usual time, it must be exposed to cold twenty days after being laid, and kept in that condition for two months, and then removed. Six weeks later it will be in the same condition as ordinary eggs, and can be treated in the same manner. In this way it is possible to have silk-worms ready for hatching at any season of the year.

**CONDITION OF FARM ANIMALS.**—Horses and mules, the most valuable class of domestic animals, receive more uniformly the requisite care and protection than other stock. If hay is scarce the deficiency is usually made good by extra supplies of grain; and yet the colts and young horses of thinly settled States are often left to the same chances, for pasturage and shelter from the rigors of winter, that are enjoyed by the less valuable stock of the range. With the exception of suffering from the severity of the past winter among this class of unstable horses, mainly in the milder climates of the country, both horses and mules are reported to be in average condition.

While pecuniary considerations appear to govern the action of farmers in the care of the dumb brutes committed to their protection, it is hoped that no respectable stock-grower will disregard the common dictates of humanity in his treatment of his dependents. A close view of the subject will show that its monetary and humanitarian aspects are usually in harmony; and a man who is a man indeed will be willing to make some pecuniary sacrifice, in emergencies, rather than subject his farmstock to avoidable suffering. The terrible loss of brute lives by the winter's severity, as recently experienced in Texas, in Kansas and Nebraska, and in Colorado and Wyoming, should be avoided, as far as practicable, by better provision for scarcity of feed, resulting from drought, deep snows, and other causes, and by greater care in providing stock with shelter, either natural or artificial.

**ODESSA WHEAT.**—Mr. L. H. Eaton, of Monroe, Green County, Wisconsin, has cultivated the Odessa wheat for five years, with good results. Twice during this time other varieties failed, but the Odessa produced twenty bushels to the acre. The berry is small but weighs sixty-three pounds to the measured bushel. It is equal to winter-wheat for milling purposes. It is eight days later in ripening than other varieties.

**ENCOURAGEMENT TO TREE-PLANTING IN MAINE.**—The following act was passed by the recent Legislature, and has become a law:

"That any land-holder in this State who shall plant or set apart any cleared lands, or lands from which the primitive forests shall have been removed, for the growth and production of forest-trees, within ten years after the passage of this act, and shall successfully grow and cultivate the same for three years, the trees being not less in number than two thousand on each acre, and well distributed over the same, then on application of the owner or occupant of such lands to the assessors of the town in which the same is situated, and is so successfully cultivated or set apart to forest trees, and at the time of such application shall file with said assessors a correct plat of such lands, with description of their location, and setting forth all the facts in relation to the growth and cultivation of said grove of trees, or incipient forest, the same shall be exempt from taxation for twenty years thereafter; provided such grove or plantation of trees shall during that period be kept alive and in a thriving condition."

**HEAVY YIELD OF CORN.**—J. Sanders, of Saunders County, Nebraska, deposes that he raised eighteen acres of corn last year, which averaged ninety bushels to the acre. J. H. Nesbitt, of the same county, also deposes that seventy-five acres of corn raised by him averaged ninety-seven bushels per acre, while another field of one hundred and seventy-five acres averaged eighty-five bushels per acre.

**PREPARATION OF BEET LEAVES FOR FODDER.**—Méhay maintains the entire success of his method of so preparing the leaves of the beet as to render them capable of preservation for several

months as fodder; and at the same time greatly improving their qualities as food for cattle. The method consists simply in placing them in baskets, and immersing them in a tank containing diluted hydrochloric acid of 4 degrees of Beaumé. The result of this is to greatly condense the volume of the leaves, and to render it necessary to add more fresh ones to fill up the basket, which has again to be immersed, and finally allowed to drain off. The leaves may then be placed in beds, in dry earth, and kept until needed for use. According to a report of a committee who examined the result of this process, domestic animals become extremely fond of the leaves thus prepared; and, indeed, milch cows fed with them are said to give a large increase of milk, with a decided improvement in the quality of the butter. The tendency to diarrhoea in cattle produced by the fresh beet leaves seems not to be developed by this prepared fodder, and for this and many other reasons it is strongly recommended to agriculturists.

## Correspondence.

ATLANTA CITY, May 22nd, 1872.

Editor Deseret News.

Dear Sir,—Through the kindness of M. A. Holsted, superintendent of the Vallejo mine, I had the honor of visiting his works in the above named mine yesterday morning. The Vallejo is situated a little west of north from Alta, something over half a mile distant, and about one thousand feet greater in altitude. It is five hundred feet from the Flagstaff and sixteen hundred feet from the Emma, almost in a direct line between the two, and undoubtedly as good as either, when properly developed. The owners of this mine, as well as many others here, have to work under many disadvantages in getting their ore from the mine to where teams can get it. This is accomplished by taking say three to four sacks at a time, fastening them together and drawing them the entire distance, which is a very tedious job. Mr. Holsted informs me they intend building a substantial tramway from the mine or mouth of the tunnel to the main road leading from Alta to Central. This will be a wire or rope tramway and will in most places be from twenty-five to thirty feet from the ground in order to avoid the deep snow during winter. Of course this will be an expensive undertaking, but evidently will pay in a short time for its erection by being more convenient and much less expensive in the transportation of ore.

After preparing ourselves with lighted candles we proceeded to the interior. Five hundred feet from the mouth of the tunnel brought us to what is called the West Drift. Here we found an immense amount of ore, in fact on either side, above and below, is one solid mass of mineral, with all the varieties of color one can well imagine. The light spots of galena, interspersed here and there, sparkle like so many gems. From the tunnel there is a shaft leading to the upper works. By numerous windings, ladders, shelves, &c., we at length reach this large and extensive excavation, where, in almost every direction, are seen solid walls of mineral and great stacks of ore already sacked for shipping. From this there is a shaft to the surface known as the Old South Star Shaft. There is an excellent draft passing from the shaft above to the tunnel below.

The Emma, Flagstaff, Wellington, Titus, Highland Chief, Lexington, Davenport, Ohio, Enterprise, Bruner, Illinois, South Star, and several others are preparing to ship their accumulated ore at an early day. Some of the mines have shipped considerable during the winter, especially the Emma and Flagstaff. Several new buildings are in the course of erection, among which is the Deseret Telegraph company's new office. Everything looks favorable for a lively summer in mining affairs.

The Howland Tunnel company have been progressing rapidly, considering the inclemency of the weather. Since they commenced their work, scarcely six weeks ago other tunnel sites are being located and worked in almost every direction. Weather mild and pleasant, snow melting exceedingly fast.

Yours truly,  
S. A. W.

Nearly the same materials are used in the manufacture of sugar of lead as of vinegar.