

HOME INDUSTRY.

It seems that our remarks in the agricultural columns of the News of last week, under the heading of "Agricultural Science and Art" produced an affirmative vibration among some of our most experienced and practical men.

"ONE OF THE MECHANICS," a gentleman of acknowledged skill in mechanism, ventilates the subject thus:

The windmill as a motor has been used from very early times in England and on the Continent of Europe, and, for driving flour mills and raising water for irrigation and drainage has given a fair amount of work, especially considering the proverbial uncertainty of the impelling power.

The Dutch appear to have been the first to avail themselves of it to any great extent for draining their low countries; and in some parts of England, till within a few years, numbers of them might be seen in every direction raising the water from the main drains into channels at a higher level. They have now been mostly superseded by large steam engines, each capable of doing the work of from twenty to thirty of the old mills, as more economical because more reliable, especially as in the countries mentioned fuel is cheap and land valuable.

For light powers, the style of mill in general use for pumping, &c., on the railroads in the States would be the best adapted to the wants of this country; while for heavier work, the old country style would probably be found the most serviceable—the principal difference being that the former is generally built as a light wheel of moderate size, full of "vanes," while the latter has from four to six arms of a large sweep with a number of small slats on each forming the "sail"—the arms in some cases being as much as seventy feet across and driving four run of stones, with their accompanying machinery.

As an apparatus for raising water in large quantities to a moderate height for irrigation and drainage the "scoop wheel" is generally conceded to be the best, requiring little or no attention, with but little wear and tear, and no loose pieces to get out of order, while from the entire absence of frictional surfaces in contact with the water, it is not liable to be injured by the water being foul or sandy.

Water power as we have it here is at best scarce and uncertain; because, from the quantity of water required for irrigation and the stoppage in the winter from frost, few mills are capable of working more than six months in the year with full power and full time.—The latter difficulty may be almost or entirely overcome by using the "turbine wheel," which, when properly constructed and adapted, gives from five to ten per cent. more power than the best constructed breast wheel under the same circumstances. The power of the water, of course, is the same, but the waste is less on this kind of wheel than on any other; while, from the higher running velocity, less gearing is required and there is consequently less loss from friction.

Steam power, when available and properly directed, is by far the most economical and reliable of any motive power being always at command and capable of being increased to any amount in the same location.

The steam engines, however, from the subtle nature of the moving force, requires more care and attention in designing and building than any other motor. Steam engines may be bought at almost any machine shop in the States, in appearance the same, but with a working difference of from four to six pounds of coal for the same power—the most favorable result for small engines of from four to ten horse power being about three pounds and a half of coal per horse power per hour. The principal points to be observed are good fitting of the working parts, the maximum of strength with the minimum of weight in all the moving pieces, a correct form and adjustment of the steam valves, and a good boiler, which is not therefore the lightest and smallest or the most expensive.

There is, in my judgment, no business which, in this Territory, will at present pay better or more surely conduce to the permanent advantage of the community, than a machine shop and foundry, even with all the incumbent disadvantages, provided that it is under the superintendence of a competent engineer, well posted on the present actual improvements in machinery of all kinds and who would owe his position to his capabilities, and not his capabilities to his position.

Iron founding, especially is always in demand and, from a careful calculation of all contingencies and expenses, I am confident that, if twenty-five cents per pound can be obtained for castings of an average weight, it will pay and pay well to import pig iron from the States with which our old scrap can be mixed and so make a really serviceable metal.

I would much prefer, however, to have the iron from the native ore; but, from the disastrous failures which have hitherto attended our past efforts to make iron in Utah, such a consummation is scarcely to be anticipated very soon.

The reapers, thrashers, &c., spoken of in the DESERET NEWS of the 11th inst., and a thousand other articles which are continually required—from a steam engine to a sewing machine, as was correctly stated, can be made here; and I may go further and say without hesitancy, that, "all things considered," machinery can now be got up here cheaper than it can be imported, as we have as good scientific mechanics as can be found elsewhere—

men who have been for years in charge of machine shops in the East and West, where brains and the faculty of using them were valued as much, at least, as the capabilities requisite for driving a yoke of cattle.

ONE OF THE MECHANICS.

Fourth of July Celebrations.

The patriotic people of Ogden city celebrated the eighty-fourth anniversary of our national independence, very appropriately, according to the report with which we have been favored, much after the old fashioned custom, in which all heartily participated without that burdensome pomp and parade that often attend such occasions.

The appropriate salutes were fired by Maj. McGaw's Light Artillery, there was a small but respectable military parade under the direction of Col. Gamble, and a public assemblage of the citizens at which speeches were made by Gen. West, Maj. McGaw and others.

The day passed off without disorder or accident, with the "Star Spangled Banner" floating over the city as proudly as it ever waved since the Declaration of American Independence.

At American Fork, the day was celebrated by the burning of large quantities of gunpowder, not by discharging cannon, as they have none of that kind of arms in that place, the raising of the national flag, a procession, an oration, speeches, toasts, &c.

No very lengthy report of the proceedings has been furnished, the reporter merely announcing the fact that the day was observed by the people of that small town in the foregoing manner, in commemoration of the signing of the Declaration of Independence, and to manifest their appreciation of the principles of liberty therein set forth.

At Nephi, the county seat of Juab county, a very imposing scene was displayed on the return of the national anniversary, but the booming of cannon was not heard among the notes of joy that were uttered or sent forth on that occasion, the men of war in that city having failed thus far to provide themselves with such weapons of defense. In musketry, however, they are not deficient, and they were used on that day in lieu of arms of larger caliber. The people were awakened at early dawn by the discharge of fire-arms and by music by Capt. Hawkin's Brass Band. The Stars and Stripes were unfurled and floated in the breeze during the day. There was a grand procession in the forenoon, also a large assemblage at the Bowery, where after the reading of the Declaration of Independence, Judge Love, the orator of the day, delivered a short oration and the Hon. J. G. Bigler, Mayor of the city, made a patriotic speech.

A sumptuous dinner was provided, of which all the citizens, without distinction, partook in old fashioned style; after which, speeches were made; toasts and sentiments offered and songs were sung, the whole interspersed with the enlivening music of the Band.

The committee of arrangements consisted of Messrs. G. Kendall, H. Brown, M. Miller, W. Broadhead and E. Harley.

It may be considered unnecessary to add that not only at Nephi, but at Ogden and American Fork, after the usual ceremonies of the celebration were performed, the balance of the day and evening was devoted to various kinds of amusement, and that dancing in particular was indulged in quite extensively.

Retired.

By the last number of the Mountaineer we are informed that Major Blair, the late senior Editor of that paper, has retired from that establishment with the intention of entering once more upon the scenes of a frontier or border life, which seem congenial to his taste and suited to his constitution. He is preparing to erect a saw mill at Franklin, the most northern settlement in Cache county, as the incipient step to his establishing himself permanently at that place, to which he intends shortly to remove.

The Major's health is not good and he is of the opinion that a country residence on the frontiers of civilization will be more conducive to the enjoyment of life, than the duties he has of late performed.

He will please accept of our best wishes for his welfare and prosperity in all time to come.

A violent type of yellow fever was raging at Acapulco, from the effects of which upwards of 500 deaths had occurred within six weeks previous to the 26th of May. Among those who had died were the American Consul and some twenty Americans. Those who had the opportunity were fast leaving for the interior of Mexico.

Extending "Aid and Comfort" to the Hostile Indians.

Through the politeness of Gen. Stambaugh, we have been favored with the perusal of a letter written by a gentleman well known in this country for probity and veracity, dated at Deep creek, C. & S.L. Mail Line, July 15th, and received by Monday evening's Express, in which there are some grave and serious charges made against a certain Government herdsmen in Rush valley, at whose camp, as alleged hostile Indians that have been engaged in the depredations committed on that route between this city and Carson have been harbored and encouraged by receiving food, clothing, ammunition and such "aid and comfort" as they needed to carry on their warfare with the whites along the Mail Line, which they have been prosecuting for months with much success.

The writer says that the Indians have recently stolen and killed between thirty and forty head of stock at that place; that Major Egan had been out after them with a party in order to find and chastise them for their temerity but had returned without seeing one of the hostile red men, and that two friendly Indians had told him that the marauders had gone to the aforesaid camp, where it was presumed they would obtain a fresh supply of ammunition and provisions to enable them to renew and carry on hostilities. He concludes by saying: "We have enough to do, to contend with the savages themselves, without having white men furnish them the means to kill our men as well as our stock;" and suggests that the attention of Colonel Smith, at present commanding in the Department of Utah, should be called to the subject that the evil might be stopped.

If the facts are as represented, measures should be taken immediately to bring the offenders to justice and, if persons in the employ of the United States are aiding the Indians in that way, they should be made to feel the weight of that power so much money has been expended ostensibly to support.

Gen. Stambaugh, as "acting Superintendent of Indian Affairs" in this Territory, will undoubtedly take measures to ascertain, immediately, whether those grave allegations are true or false.

SCHOOL TEACHERS' AND TRUSTEES' CONVENTION.—The trustees and teachers of schools in Utah county are requested to meet in convention, in the Seminary building, at Provo city, on Sunday, July 29th, at 9 o'clock a.m.

A full attendance is urged, as matters of interest and importance will be presented for consideration.

To Make Unfermented Bread.

Take the usual quantity of flour, either fine or unbolted, pour scalding water on it, and mix or stir to stiff batter, then cover it with dry flour, roll it out half an inch thick, cut into small cakes, and bake in a very quick or hot oven.

If salt is used it prevents the bread being light. We are sure this statement will not be credited as truth, yet it is really true, and you will have light, sweet, healthy bread. If you do not succeed first time, "try again;" and if you do not like the taste first time, you will soon learn to like it, and find it so much superior to fermented bread, of which 99 per cent is sour, that you will always eat it in preference.

If you don't believe we make such bread, come and see us at home, and eat with us.—*Cal. Farmer.*

—The French journal's report, that insanity is much on the increase in Paris. Three lunatics on a recent day, successively applied for admission at the Tuilleries, seeking an audience of the Emperor Napoleon, on various pretexts. A considerable number of eccentric and insane persons, have recently publicly exhibited their peculiarities in such a manner as to call for restraint.

—It is satisfactory to the Second Advent people to know that J. V. Himes, the leader of the American flock, has made an agreement with Dr. Cumming, whereby the end of all things, including the world, is to take place in 1867. So long as these two lights were at variance concerning the time of the catastrophe, of course nothing could be done. So says an exchange.

—A frog is said to have been killed in Texas, which was 18 inches across the shoulders and 2 1-2 feet long. Good news for frog-eaters.

—The Legislature of Kentucky offer a reward of \$1,000 for a cure of the hog cholera now prevailing in that State.

BOWERY.

On Sunday morning, July 15, at 10 o'clock, Elder James W. Cummings addressed the congregation, taking for a text, "Whosoever transgresseth and abideth not in the doctrine of Christ, hath not God. He that abideth in the doctrine of Christ, he hath both the Father and the Son."—2d Epistle of John, verse 9. Said the religious world are groveling in the dark because their forefathers neglected to abide in the doctrine of Christ; argued that the predictions of the old prophets are being fulfilled to the very letter, and that the curse of God is manifestly resting upon those who have rejected the message which the Lord has sent.

President Heber C. Kimball spoke upon the text, "He that believeth and is baptized shall be saved; but he that believeth not shall be damned."—Mark, 16th chap. Called upon the Saints to abstain from everything that is wicked and to cling to that which is right. Briefly alluded to his receiving the gospel and the evidence the Lord gave him of its divine origin, and to the judgments that are being poured out upon the nations. Remarked that those who neglect their prayers become stupid and incapable of comprehending the truths of the gospel of Christ.

President Brigham Young said: This people have the words of eternal life within them; that those who turn away from the truth become dark and benighted and walk in thick darkness; if the light that is given be taken away, the darkness that follows is in proportion to the light that has been possessed; the man who has not passed the day of God's favor, will have the light of God gleaming in upon him occasionally, but when that point is passed he is given up to the buffetings of Satan. No matter who proclaims it, the truth belongs to the people of God; if Lucifer comes and presents a truth, the Saints have a right to receive it, for it is theirs and not his; it is for the Saints to receive all truth, but they are not under obligation to obey any man or being except the Son of God, to whom we belong. Those who take the road that leads to death; who pursue a course to destroy their neighbors, will be destroyed. Men may read the words of life, but the natural mind cannot understand the things of God; they must have a preacher to proclaim to them the words of life. All we read in the newspapers about the plagues of the last days is not much; all that we hear and now know is not the preface to the sermon that is to be preached to the people in hailstorms, in earthquakes, in thunderings and the general destruction; the sea will heave beyond its bounds and famines will spread abroad, not only in a county, but it will spread and be felt in States, nations and over continents, and the Saints will close their eyes upon the scenes that will be presented before them, and their hearts will be filled with pain. The bowels of Jesus yearn over the people of that nation that have persecuted the Saints of God for these thirty years, and many of them can yet be saved if they will turn to the Lord. Reasoned on the progressive nature of the gospel; observed that it is a present salvation that we need; and we can enjoy nothing else; we need the Holy Ghost now to keep us on saving ground; we require to be saved now, to-morrow, the next day, and finally, if we continue in good works, we shall be saved in the celestial kingdom of our God, when it is time for us to go there.

In the afternoon, President Daniel H. Wells, Bishop Hunter and President B. Young delivered short addresses to the congregation.

Latest from the West!

The express came in from the west on Monday evening bringing little or no news, further than that the pony came through from Carson, without molestation. It was believed that the hostile Indians on the route had mostly left it for the time being, not because of the presence of the troops, but to recruit their horses and prepare for future operations.

CALIFORNIA MAIL.—As we were going to press yesterday evening the California mail arrived. It was reported as being in a very damaged condition and we could not wait for it to be distributed.

COUNTY COURT.—A session of the County Court for Great Salt Lake county will be held on Friday August 3d, pursuant to adjournment.

WOOD! WOOD!—A few cords of wood will be received on subscription to the DESERET NEWS. Bring them on without delay.