OUR DOMESTIC CORRESPONDENCE.

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CALIFORNIA.

VINEYARDS ON THE PACIFIC COAST—THEIR CHARACTER AND EXTENT—ARTIFICIAL IRRIGATION—THE WINE-GROWING CAPACITY OF CALIFORNIA.

From Our Special Correspondent.

SAN FRANCISCO, May 27, 1866.

When the adventurers into the gold-fields of California first set greedy eyes upon them, they saw nothing but sterility and desolation from the ocean to the mountains, and they very naturally concluded that a soil which, in the Winter season, was soaked with incessant rains, and, in Summer, was parched with heat from June to November, was totally unfit for all agricultural purposes. Hence, they contented themselves with scanty supplies of bread and bacon, brought from the Atlantic States or from Chili, until such time as, with pockets full of rocks, they should be able to quit such an inhospitable region and once more sit down to enjoy their gains under their own vine and fig-tree, by the fertile banks of the Connecticut or Madawaska. A few, now and then, tried to experiment by raising the commonest kind of vegetables, where they possessed ample facilities for irrigation along the water-courses, and they were surprised to see their labors rewarded with a yield of pumpkins and potatoes more than twice as great as they had ever raised at home. Still, such a *provisional* arrangement as this was quite too expensive and precarious to be relied on with any certainty, and the great mass of the people had to look for their supplies from the distant sources I have mentioned. None of them ever dreamed that these skies, shedding alternately six months in the year either continual heat or rain, and baffling all their notions of the seasons in their courses, or that these black and sandy plains, where everything green seemed to wither and die soon after it made its appearance, possessed the vital elements that give growth and expansion to the vegetable kingdom, in a measure never witnessed on any other part of the globe. Still less could they believe, applying the laws of their own experience to what they saw around them, that a country offering such a picture of desolation as this, and furnishing the necessaries of life in such pitiful proportions, could ever be made a fit habitation for man, and consequently they rested in the delusion that, when the supply of the precious metals should fail, California, having no other resources to fall back upon, would be entirely deserted.

Gradually, however, the truth dawned upon the minds of men that this sterility was only apparent, not real. At first, vegetables in large quantities, then the cereals, and afterward fruits were raised; and it was soon discovered, on trying the experiment, by proper attention to the new laws of nature that had to be studied here in respect to seed-time and harvest, that, with only about half the labor required in other countries, double the crops could be raised. Thus, from a state of almost absolute dependence on other countries for both the luxuries and necessaries of life, California became, in a few years, a producer far in advance of her powers of consumption. Her granaries overflowed, her orchards were loaded with fruit that could find no market, in her gardens were to be seen, nearly all the year round, the esculents of almost every clime, and her lap was literally filled with such a superabundance of agricultural products of every kind, that she was in danger of being stifled with the burden.

As with other kinds of culture, so, under some modifications, with that of the vine. This, it was believed, at an early day, could be carried on to advantage in the Southern part of the State, on account of the mild climate, provided the effects of the heat and the dry weather could be overcome. Accordingly we find the Missionaries, who were the first to introduce the vine into this country from Old Spain, making use of various experiments and expedients to raise it. What gave them the most trouble was in the selection of sites. These had to be in places sheltered from the heat, where the streams from the hillsides could be diverted upon the young vines to prevent them from perishing. But as such choice localities were few in number, the growth of the vineyards was necessarily confined within narrow limits. Yet such as it was, we are indebted to these "early fathers" for its origin; and the kind of grape, that is now so extensively used throughout the State in the manufacture of wine, derives its name of the "Mission grape" from them.

For a long time, the system of artificial irrigation thus introduced was thought indispensable everywhere, as it still is in and about Los Angeles and the lower part of the State generally; and it was not until after the conquest of the country by the Americans that the experiment was tried of raising grapes without it. This was successfully done in all the northerly portions of the State, and particularly about Sonoma, where owing to certain adaptations of soil and climate, great attention has been paid to grape-culture, and it has reached a perfection almost unprecedented. In the beginning, it was confined to such varieties as were suited for the table, and wine was not thought of, except in such limited quantities as sufficed for home consumption. The idea of making it on a large scale, for foreign markets, was reserved for a later period, when it was discovered on trial that not only the valley, but the hills all around in this favored locality, were capable of producing an article unsurpassed in all the higher qualities of this world-renowned beverage. After this, people began to enlarge their views as well as their vineyards; many men from the Old World, particularly from the Rhine, skilled in the art of wine-making, flocked hither and either bought up the old vineyards or set out new ones, until hundreds of acres were covered with vines, some of them new varieties, but the greater part of the "Mission grape," which experience had proved to be so well adapted to making the best quality of wine.

As it requires four or five years for a vineyard to be in a good bearing state, and, no doubt, double that time to produce the best article of wine, it is only quite lately, within the last two or three years, that Sonoma has been able to turn out anything that fully meets the public wants—a rich, generous, and highly flavored wine, a wine fully up to the standard of the best European brands. And *that* she has, no doubt, at last accomplished, in the estimation of the best judges.

That such a result as this ought to be regarded as a source of national pride and gratitude, no one can deny. And in view of the immense benefits that the people of any country derive from it, this branch of their industry ought to receive, one would think, if not the direct support and encouragement of the Government, at least an exemption from its burdens. Instead of this, however, we see in our own country the heavy hand of legislation laid upon it as if it aimed at its suppression, while yet in its infancy. Instead of fostering an interest which the whole civilized world are now coming to regard as one of the principal agents in checking the spread of intemperance, and in advancing the health, morals and social progress of the race, our legislators in Congress have thrown around it an unnecessary restraint by taxing the manufacturer to such an extent as to seriously embarrass and imperil his business, and in the same proportion increase the cost to the consumer. This is a curious evil, one which it is to be hoped will be speedily suppressed by expunging the odious Act from the statute-book. Such an interference with the production of this staple article in any of the great wine-growing districts of Europe would work as wide-spread calamity as an excise-duty put upon the manufacture of bread, or upon the use of water as a beverage. The vast addition to the public wealth, derived from the manufacture of wine, in large quantities, in any of those countries where the conditions of soil and climate favor it, will astonish any one not familiar with the subject. It seems like exaggeration to say that the discovery and introduction of a single variety of grape, out of which a pure, cheap and wholesome wine can be made, are of more importance to a people than paying off the national debt.* Yet when viewed in all its bearings, this remark may be vindicated against the charge of extravagance. As there is scarcely any limit to the extension of vineyards, and consequently to the production of wine, so there is none to its profitable sale and distribution. Confined in its use to no particular region, it commands the markets of the whole civilized world. Far from being perishable in its nature, time only adds to its value, and at a much greater than compound rate of interest, every year. If we would assure ourselves of these facts, we need only look into the statistics of any of the great wine-growing States of Europe. The annual vintage of France is estimated at over 1,000,000,000 of gallons, that of Hungary at over 300,000,000, and that of Spain at about 200,000,000. Calculating this value at only 25 cents a gallon, it would give us for the wine-crop of France, every year, over $250,000,000; for that of Hungary over $75,000,000, and for that of Spain nearly $50,000,000. If the very large sum derived from the sale of the grapes in a fresh and dry state, and from the manufacture and sale of brandy, were to be included in this estimate, it would swell the aggregate value of the vineyards of these countries to a much larger figure. Such a simple calculation as this will serve to convince the most incredulous of the enormous and almost incalculable importance of an industry which, instead of being checked in its career in our own country by unwise and misdirected legislation, ought to be left free to follow out the laws which govern its growth and expansion in other countries.

But there is another highly important consideration. In all these countries wine is considered a necessity as well as a luxury, meat as well as drink; and it enters so largely into the daily consumption of the people that, whenever a sudden stoppage of the supply takes place, it paralyzes all their energies, and is a sure precursor of famine. Such an event as the general failure of the vintages, for a single year, is felt as a calamity through the length and breadth of the land, and every house, in the rural districts especially, is converted into a house of mourning. Now, although it is possible for a people unaccustomed to this article of food to subsist without it, just as we see communities, unaccustomed to any other article of food, prospering and multiplying without it, and in spite of it, yet when the conditions are favorable for it the cultivation of the vine becomes an imperative duty, the neglect of which is as censurable and attended with the same evil consequences, as to neglect the growth and production of any other commodity that ministers to the daily necessities of the people. This view of the case is supported by the testimony of the best writers on dietetics and kindred subjects, who furnish abundant statistics to show the value and advantages of wine, considered in the light of an article of every day use and consumption.*

But to return from this digression—the question presents itself, Have we equal facilities, in this country, for producing a superior quality of wine, on a grand scale, with the celebrated wine-growing districts of Europe? This question is already practically decided in the affirmative. Experience shows that, in at least one of the United States, there is a boundless field for this enterprise, equal in extent to the most favored of these districts and far surpassing them in natural advantages. It has been satisfactorily determined that the vine will flourish, in the highest state of luxuriance, in California, from near the sea-coast up to and beyond the foot-hills of the Sierra Nevada Mountains—an area which, it is safe to calculate, is at least equal to the territory now covered by vineyards in France. This, in France, is estimated at about 5,000,000 acres, or nearly a twenty-fifth of the surface of the whole French Empire. Many of these vineyards, like those of the famous *Côte d' or*, are grown on a sandy soil, and, in many places, on rocky ridges or terraces; in other words, on lands wholly or partially unsuited to raising other crops. While the vines do not absolutely disdain the best soil, they undoubtedly flourish better on what is considered the poorest. Some of them are seen growing on land so choked with shingle and stones that it is with the greatest difficulty the holes can be made for the "cuttings;" others are seen climbing up the steepest acclivities and clothing with beauty and plenty the most barren spots. Moreover, the average yield of the vineyards of California is twice as great as in Italy, where they yield the best of any country in Europe, and more than three times as great as in France. In Europe the yield is subject to great fluctuations, some years being greater and others less; and the character of the wine seems to differ in about the same proportion for different years, an inferior quality, however, being produced the most frequently. No such disparity exists in California, to anything like the same extent. No failure of the grape crop has ever been known. On the contrary there has been a steady increase, every year, in the same vineyards. In Europe they are obliged to protect their vineyards against the encroachments of vermin and diseases not a few. Sometimes it is the vine that is affected, at others the grapes. But California is singularly exempt from all such pests. In no other part of the world is the vine so healthy. There are no bugs, no mildew, no rot to guard against, and only such ordinary care required of it as is required for the cultivation of any other plant.

To get some adequate idea of the wine-growing capacity of California, one ought to visit the vineyards of Sonoma Valley, in the Fall, during the time of vintage. Not that several other parts of the State are not equally interesting and instructive on this score but because the grape grows here in the highest exuberance, and is entirely free from a superabundance of watery particles, which, in the lower counties of the State, where methods of irrigation are necessary to bring it to maturity, somewhat affect its character as a wine-producer, and from the further fact that here the vineyards are the most extensive of any in the northern part of the State. Sonoma may be taken as a fair example of the ability of California to grow wines that at no distant day will raise it to an equal rank and enable it to compete successfully with the first wine-growing regions of the globe.

This lovely valley, which, as you approach it from the hills on either side, offers the most enchanting vision of rural quiet and felicity, lies in about the same latitude with the southern part of the Peninsula of Spain and Portugal, but with a climate resembling, in a remarkable manner, that of the southern part of France. It is seated a considerable distance inland, and is guarded on the West by a high range of mountains, which present a barrier against the fogs and winds from the ocean. On the south, it is connected with the beautiful Bay of San Francisco by the Sonoma Creek, a stream considerable enough to float, at high tide, all the commerce that is carried on between the interior and the seaboard. The hills on the other sides of the valley, scarcely lofty enough to be dignified with the name of mountains, fade away imperceptibly in the distance, crowded with the red-wood, and the still redder *madrona* and *manzanita*, while the center of the valley is crowded with live oaks, whose ever-green tints form so fine a feature in the landscape, and which, thanks to the good taste of the inhabitants, are spared to throw their shade and cheerful influence over the whole scene.

Much of the soil along the bottoms is composed of the richest *alluvium* imaginable, which quickens into the highest vegetable life every seed and plant put into it. On account, doubtless, of this marvelous fertility, the first settlers were seduced into the belief that these rich bottom lands were the best suited for vineyards, and hence we see the oldest ones too often planted in the most unsuitable places. This mistaken policy has prevailed in other portions of the State, though, in point of fact, it is contrary to one of the simplest canons of vine-culture, which is to avoid the richest lands as much as possible, or rather, those which collect the most moisture underneath the surface. For, as the vine-dressers express it: "The vine cannot endure wet feet." As you approach the hills, however, the character of the soil changes into a mixture of sand, gravel, and tufa, colored in many places by the oxyd of iron, and exhibiting unmistakable evidence of volcanic origin. Much of this soil rests on a rocky substratum; and on the higher elevations, the rocks jut out in many places into parallel chains, or reefs, forming natural terraces, where the vine loves to curl its tendrils and spread out its tender leaves to the warmth of the sun. On these hills are to be seen the favorite haunts of Bacchus. Just here it is that, in coming years, the traveler will behold the most fruitful vineyards in the world spread out before his astonished eyes, bending under the weight of their purple clusters, and giving token of the highest prosperity that can reward the labor of the husbandman. He will see them reaching from the base to the summit of the hills, and extending for miles and miles along the most precipitous passes. Nor have all the wine-growers of the valley shut their eyes to these natural advantages of location. Several of those who had seen or practiced the most successful methods of culture in the Old World, have applied the principles of their time-honored art in selecting and arranging the vineyards they have acquired in their new homes; and one of the most flourishing and productive of them is now to be seen on the top of one of the hills I have described, most successfully cultivated by an intelligent countryman and comrade of Kossuth, who has named it "Tokay" from some resemblance, either in the character of the wine or site, to that far-famed mountain in his native land.

The whole process of planting and taxing care of one of these vineyards until it matures into a perfect state is one of the simplest things in the world. Nor need the cost of labor deter any one from undertaking the task. The labor of the very largest vineyard in Sonoma is carried on entirely by Chinese, who can be hired at cheaper rates than almost any of the laborers of the East. And I have visited another, one of the best in Sonoma County, where the proprietor employs nothing but Indians. By kind treatment, and teaching them habits of industry, he has so far weaned them from their savage state that they seem to have conquered all their prejudices against labor, and, one and all, male and female, set about their daily task with as much alacrity and serviceableness as ordinary white laborers. The only obstinate element in the way of raising a vineyard in California is that of time, and this, it must be confessed, goes against the grain of the people amazingly. If it took no longer to mature a vineyard than to level a mountain in search of gold, to drain a river, or build a city, or overcome any other obstacle that *would* be overcome, the face of the whole country might now be dotted with vines. But *here* nature will have her own way, and she has declared in the most peremptory manner, that if you will have one of her choicest gifts, you have got to learn to labor and to wait at least five or six years. With only this drawback, the production of a perfect vineyard is within the reach of the most ordinary agricultural craft and industry.

At the proper season, which is any time from December to March, the "cuttings" are set out in parallel rows, about eight feet apart, and the ground between them is plowed in the same way, and with the same kind of instrument, as corn is plowed in Kentucky and Illinois. The art of "pruning" is attended with no more difficulty; and when this is done any one who wants to set out a new vineyard can obtain all the "cuttings" of the "Mission grape," he wishes for the asking. As to "training," the usual practice is to fasten the vines to stakes four or five feet high, and many persons let these stakes remain for an indefinite period. But the best plan is to remove them entirely, after the vines begin to bear, and let the grapes hang as near the ground as possible. They ripen better in this condition, and are said to produce the best wine.

Far more interesting, however, than any of these methods of culture to both the spectator and the owner of the vineyard, is the season of the vintage. This takes place about the latter part of October; and, it is truly a season of heartfelt joy and festivity. As the weather is always delightful, old and young of both sexes flock together, to join in the gathering. There is no fear of rain or of intense heat, and there is scarcely breeze enough to stir the broad leaves of the vine, which now begin to put on their russet coat, to be changed soon for one in which the pink and crimson will predominate. Nimble fingers are seen everywhere clipping the ripe bunches, and throwing them into clustering heaps. The ring of merry laughter is heard over all parts of the vineyard. The luscious loads, heaped into baskets and boxes, are taken in wagons to the wine-press.

Now commences in sober earnest the real business of making the wine, and this also consists of the simplest contrivances. The fruit, thoroughly ripe (none other should be used), is first subjected to the operation of "mashing." This is done by one or two hands (the *feet* are never used for this purpose in Sonoma, as in most of the countries of Europe), sometimes in a wooden tub or barrel, with a long-handled stamper, but most usually with two parallel rollers, between which the "berries" are crushed in such a way as not to break the seeds or kernels. Some persons strip the "berries" from the "combs" or stems before "mashing," because they say the *tannin* extracted from the stems imparts a harsh taste to the wine. But others prefer crushing the grapes on the stems; and these claim that the *tannin* acts as a preservative of the wine, and rather improves than injures its flavor. Whatever the difference of opinion on this point they all agree that the "pressing" should be commenced as soon as possible after the press of "mashing" is over. For nothing injures the juice so much as exposure to the atmosphere. There is a great variety of wine-presses in use. One of the simplest, and probably as good as any, is nothing more nor less than a reproduction of the ancient *trocular* employed by the Romans for the same purpose. It consists of an upright box or frame-work, in which the grapes are pressed by means of a long arm or lever, with stones or other weights fastened to the handle. As soon as the juice, or *must* as it is called, comes from the press, it is collected in large vats or casks to undergo "fermentation," which takes place usually within about 24 hours afterward. This sight to the stranger for the first time is an interesting one. He sees the agitated and steaming mass whirling around with much violence, and it reminds him of nothing so much as the boiling and bubbling of the witches caldron in Macbeth. But let him not approach too near, or stand too long over one of these seething vats. For out of it escapes in great quantities the deadly carbonic acid, which, disengaged from the heated fluid, takes its flight in clouds of vapor. The most careful wine-makers guard against any evil effects from this cause by keeping the fermenting vessels covered, and allowing the gas to be conducted through tubes or pipes into basins of water. This also obviates the evil tendencies of contact with the air, to which the young wine is extremely sensitive, and from which, if too much exposed, it imbibes the most baneful properties.

When the first fermentation called the *vinous*, because it generates "spirits of wine," or alcohol, is ended, the wine is placed in the cellar, in pipes, which are kept full and tightly bunged, so as to exclude the atmosphere. Some allow it to remain in these, on the "lees" until the second, or Spring fermentation sets in, while others draw it off once or twice before this period. But whatever their practice, in this particular, they all adhere, in theory at least, to the habit of observing the most scrupulous neatness in the preparation of the cellars and of every vessel into which the wine enters. Every object the least offensive is carefully excluded, so that its flavor shall not be contaminated.

It is a curious fact that this second fermentation always takes place about the time the young buds begin to put forth on the vines the following Spring, which has led some to suppose that there is some sort of sympathy between the new vine and the new shoot, as if the former wanted to rescue itself from its unnatural bondage, and "be a bud again;" or, as if it meant to make protest, by this vernal struggle, against the harsh decree by which its vegetable life is extinguished, and it is made to pass, Proteus-like, into a new form, where, by the subtle laws of its being, it assists in vitalizing and renewing the energies of man. If it outlives this second agony, without passing into the acetous fermentation, which turns it into vinegar, it becomes clear, sparkling and aromatic, and goes on acquiring strength, body and durability for many years.

Most of the wines of Sonoma Valley are yet in their infancy, and only approximating that state of perfection which time will inevitably give them. Nevertheless, even now, one will find there both red and white wines, that at the same age, cannot be excelled in any part of the world. And they are so cheap and common, too, as to be brought within the reach of almost every inhabitant. Indeed, it is a rare thing to see the dinner-table spread, anywhere, without them, and they are the boast and pride of every farm-house in the valley. To any one who has never seen the sight, it is worth a journey from the Atlantic States to see one of their well-filled cellars. Many of these contain from 10,000 to 20,000 gallons apiece, kept in pipes which hold about 100 gallons apiece, ranged around in rows next the cellar walls. Of course, the capacity of the cellars is measured by the capacity of the vineyards. But the latter increase so rapidly in productiveness, that the owners are under the necessity of constantly enlarging their cellars, from year to year, unless they have made provision, as a few of them have done, for this wonderful annual increase. To say nothing of the additions made to the size of the vineyards, by putting out new vines every year, the new crop of grapes is generally double that of the preceding year, and, in some favored localities, more than double. Thus, for example, the vineyard, planted by a brother of Gen. Butler, yielded, in 1863, only about 75,000 lb of grapes. But, in 1864, they gathered off the same more than 160,000 lb. And this regular increase goes on for many years.

Nor does the vine, like most other plants, die out, after a certain period, and require to be renewed. One of its greatest merits is that while, without any additional labor, it is all the time improving in bearing capacity, it is endowed, in a mild climate with the most astonishing vigor and longevity. Among the oldest vines to be seen at Sonoma are some planted by Gen. Vallejo, over 25 years ago. They are of the size or an ordinary apple tree, in full health and vigor, and they have never been known to fail a single season, since they acquired sufficient age to bear at all, to produce enormous crops of grapes. But these and all other grape-vines on the coast, and perhaps in the world, are entirely cast into the shade by one, now flourishing in the highest gauberance, near Santa Barbara, in the lower part of the State. This gigantic specimen measures over three feet in diameter, and it has been trained over an immense arbor so as to give full expansion to its vigorous growth. In some favorable seasons, incredible as it may seem, it has been known to bear over 15,000 lb of grapes, and its yield is always large enough to give comfortable subsistence to the family in whose possession it has remained for a number of years. There is no reason to doubt, therefore, that the vine in California may reach the extreme longevity, as it already has the enormous proportions which it has attained in the most favorable sites in the Old World. We may get an idea of what this longevity is, when we call to mind the fact in history, that the celebrated vineyards of Tokay were planted by the Emperor Probus in the third century.

Such are a few of the facts that pertain to the growth and culture of the vine in California, and surely they are of importance enough to attract the earnest attention not only of those immediately interested in the business, but of every well-wisher of his country. The fact that right here, in our midst, a new kind of industry is springing up, and gradually and almost imperceptibly overshadowing every other around it—an industry that opens up fresh and immense avenues of wealth, one that is not precarious or temporary in its character, but able in a remarkable degree to widen and extend itself, and hold good its claim to permanence and preeminence—such a fact as this is well calculated to challenge our admiration, and to invest the pursuit in question with an interest and magnitude second to none in the land. If there were any room for doubt on these points, we ought to hesitate before pronouncing so positively upon them. But it is well known—demonstrated by repeated experiments—that in almost every nook and corner of California, away up in the gorges of the Sierra Nevadas, as well as in the numerous chains of hills that bind that grand range with the ocean, and all through the intermediate valleys, the vine may be made to cover with its luxuriance every speck of desolate and barren surface. It needs no prophet's vision, therefore, to see in a few years vineyards so extensively scattered over the State that people will speak as familiarly of the "vine-clad hills" of California as they now speak of the vine-clad hills of France or Italy; and to see these so prolific in wealth as not only to exceed all other sources of agricultural profit, but to fully indemnify California if her mines were entirely swept out of existence. Indeed, we may go further, and assert with the highest confidence that her mines, important and valuable as they are, bear no comparison, in these respects, with her vines. Take one year with another, and the annual average yield of her mines is less than $50,000,000, while her vines, when grown to the extent they *may* be, and in a few years *will* be, cannot fall short of three times this valuation. Then these mines, while diminishing in extent and value, year after year, must eventually become exhausted. But her vines will all the time increase in value, and be a perpetual and inexhaustible source of profit. Mining has about it the element of uncertainty. The proportion of those who are successful in it, compared with those who are unsuccessful, is limited. Not so with vine-culture. It is a safe and stable employment, bringing to those engaged in it sure and regular returns every year. Mining is detrimental to the health as well as the morals of a community. The necessary exposure to all extremes, which it leads to, wears upon the constitution, and the evil associations with which it surrounds itself contaminate the soul. We see "mining camps," as they are called, too often the nurseries of vice and dissipation. While, on the contrary, no pursuit is more healthy, exhilarating and friendly to all the virtues than that of the vine-dresser. Those districts in the Old World where this is carried on are proverbially free from the crimes that prevail in other communities. Owing to the shifting and temporary nature of mining, it builds up no permanent homes and seldom leaves any traces of prosperity around it. When exhausted it leaves the country depopulated and in a worse condition than at first. Vine-culture, on the other hand, surrounds itself with evidences of enduring thrift and enterprise, calls into being a highly contented and industrious population, makes the waste places beautiful and productive, and crowns with plenty, which is only another name for the vine, every rugged and barren steep. Mining seldom transmits its industry to a future generation; while every family owning a vineyard is made happy in the possession of a patrimony which they can hand down to their posterity not only unimpaired, but with additional luster and value from year to year. Finally, it may be said that mining for the precious metals, to which this comparison is confined, adds nothing to the sum total of our real wealth. It merely furnishes that by which such wealth is measured and expressed. But the pursuit of the vine-dresser, like those of agriculture generally, contributes its proper proportion to the common stock of those commodities, that go to make up the wealth and to satisfy the wants of every people.

* By the Internal Revenue Act of April, 1864, the manufacturer is required to pay a duty of five cents per gallon on all wines manufactured in this country, and by the Amendment to this Act of March, 1865, one fifth, or 20 per cent, is added to this duty, making the gross duty six cents a gallon.

† In a letter to Mr. Longworth, Major Adams of Georgetown, D. C., says: "In bringing this grape (the Catawba) into public notice, Thou rendered my country a greater service than I would have done had I paid off the National Debt." And Mr. Longworth adds: "I concur in his opinion." [Horticulturist, Vol. 2, page 317.] Probably both of these gentlemen would have modified the statement somewhat, if the public debt of that day had equalled its present magnitude.

* Liebig, who is high authority on this subject, rises into a strain of eloquence when discussing the virtues of wine. "As a restorative," says he, "or means of refreshment when the powers of life are exhausted, of giving animation and energy where man has to struggle with days of sorrow, as a means of correction and compensation when misproportion arises in nutrition and the organism is deranged in its operations, and as a means of protection against transient organic disturbances, wine is surpassed by no product of nature or art."—[Familiar Letters on Chemistry.

† The classical reader will at once call to mind the lines in Virgil, from which this expression is borrowed:

Durque sperdos
Parcite mori vitis

The part of the book of the Georgics, from which they are taken, abounds in useful hints upon the same subject.

MONTANA.

MARKETS—HIGH PRICES—MINING EXPENSES—RATES OF LABOR—MINERAL LANDS AND LEGISLATION—WHAT CONSTITUTES A QUARTZ CLAIM.

From Our Special Correspondent.

MONTANA TERRITORY, April 26, 1866.

What the prices may have been in New-York, we are not precisely informed, but the current rates in Montana have been for potatoes since last Fall from 10 to 18 cents a pound in gold dust; for onions from 35 to 50 cents a pound, and so on. Flour has generally been from $20 to $30 per sack of 100 pounds, and corn meal about the same. Both come from the States or from Salt Lake. The Winter before last flour for a long time was worth from $1 to $1 25 per pound, in gold dust.

Though this is a country of long Winters and short Summers, it will no doubt in a few years develop agricultural resources of considerable extent, the high prices of all farm produce stimulating industry in this direction. The wide extent of open plains, sloping down from the mountain ranges and bordering the streams, from which they are easily irrigated, afford ample fields of rich soil for cultivation. Pine lumber for fencing and building is obtained on the sides of the mountains, and up the gulches or narrow valleys of the streams. The roads are generally excellent, and require little or no work upon them. Ranching, which is the term here given to farming, is a surer pursuit than mining, and at this season many are engaging in it, though the high prices for seed and agricultural implements are a serious obstacle. To plant 40 acres in potatoes, turnips, cabbages, onions, barley, oats, &c., one must expend at least $500 for seed. Half a pound of onion seed has been sold here this Spring for $64! An offset to this was a sale last Fall of an acre of onions in the ground for $1,500 in gold dust. A plow is worth $100.

The expenses of mining are greatly increased by such prices for the necessary supplies. Almost everything purchased costs at least three times its price in the States; if the supply is short, it may be ten or twenty times. Nothing has a regularly established value. The whole stock of certain goods in the country is often monopolized by a few persons, and held at any figures they choose. Matches, which every one uses, have sold all the Winter for 50 cents to 75 cents a box; newspapers at the same prices each one. Ax-helves of poor quality that snap like pipe-stems in cold weather, have not been less than $2 50 apiece, and have sold as high as $5. The great increase of business, however, is checking this, and home production will soon put an end to it in some articles of prime necessity.

Labor in the warmer half of the year commands rates proportionably high. Before the frost is out of the ground there is a great demand for men to work in the gulch or placer mines. Every man carrying on these operations has full confidence that he can pay from the daily products any amount of wages, and the price soon becomes as high as $8, or even $10, a day for ordinary hands working in wet ground; skilled labor is not any better paid. While the gulch mines have been of service to the country by attracting large numbers of men here, they are ruinous to settled habits of industry; and their effects in various ways are anything but beneficial to those who work them. The successes of a few excite multitudes to "try their luck," as they call it; and many find themselves at the end of the season "dead broke" and dependent for living through the Winter upon any wages offered them. "Prospecting" for quartz veins leads many more to the same result.

The Territorial Legislature in 1864 enacted a law, making quartz-claims real estate, not subject to taxation, which any one living in the Territory might on discovery stake and record for himself and friends, who must also be residents of the Territory. No work was required to develop the veins, not even to trace them out along the surface, so that the stakes might stand upon and define the real estate thus conveyed; and no responsibility whatever was laid upon those who thus became gratuitous possessors of what they selected as the richest portion of the Territory. The effect of this was to lead to the rapid recording of thousands of lodes. Offices were established in a number of districts; before books could be procured for the records the business became so extensive that the Recorders' fees were generally regarded as amounting to more than the salary of the President of the United States. The Territory was overrun with explorers, and on every hill their little "prospect-holes" and stakes are met, warning all later comers that the ground is already appropriated. The actual discovery of any metal or ore in a "quartz vein" was not necessary in order to record it; but simply a "wall rock" on one side or the other of any sort of a vein. All vein stones, whether quartz, limestone, oxyd of iron, or even pyrites, galena, and copper-ores, go by the name of quartz; and every vein, no matter how close and solid it is, is called a crevice. If in the outcropping of a ledge an explorer saw the wall rock of a vein, no work was required; he had only to set up two stakes 200 feet apart to entitle him to record 1,100 feet of claims, which should include "all dips, spurs, and angles" (whatever these may be) "emanating or diverging from said lead, lode or ledge." It became a business to employ "prospectors" to discover and stake claims for parties who designed taking "feet" by thousands to sell in the Eastern cities; and many such sales have been made of property utterly worthless. Every man, woman, and child in the Territory became the owner of a greater or less number of feet on quartz lodes they never saw or expected to see, and all are interested in sustaining the Territorial laws, under which they acquired this real or imaginary possession. The passage of any bill by Congress to sell the mineral lands is vehemently opposed, and threats are common that the execution of such a law will be resisted even by force. It is spoken of as the greatest injustice to the "honest miner" and hardy explorer and pioneer, only intended to benefit "speculators and capitalists, when everyone knows that hardly one claim in a hundred is held by the discoverer and explorer. In almost every case they took at first only one or two claims on a lode of 11 claims (or of 21 claims of 200 feet each, under the law of 1864), and this interest they generally disposed of as soon as possible, often for the most trifling sums in a few instances to bona fide operators, "capitalists" possibly; but in the great majority of cases to persons who retain them to sell at high advances, or who are in not the "speculators," with neither the disposition nor the ability to develop the mines, which they hold locked up until some one pays them their price for the privilege of opening up the mineral wealth of the Territory. In a variety of ways the Territorial mining laws are a bar to the extension of this most important branch of industry. At the outset they set aside the proprietorship of the United States in all that is of value in the Territory, distributing and scattering it in small parcels by wholesale under irrevocable titles among thousands and tens of thousands, called residents, but who have no settled homes here, and a large proportion of whom soon return to the States, carrying their certificates of record with them. These individuals may or may not be found if one wishes to work their claims. Actual improvement of the claims and proving them valuable would, in a large number of cases, be the only means of discovering the owner. The excellent code of mining laws of the Spaniards, which some profess the Territorial laws are based upon, contain the wholesome stipulation that mines appropriated by individuals should be regularly and systematically worked, and inspectors are appointed to see that this is done. Failure to work them involves reversion to the Government, when they are again open for *denouncement* or recording by those who will work them. The French and British Colonial Mining laws contain similar provisions. No code, probably, but that of Montana was ever devised to give away the mines of a country to individuals to sell out at their own prices, or to keep them shut up at their pleasure. The mining laws of the several territories were originally framed with reference to placer mines and not to quartz lodes. When applied to the latter, with the slight modification they have received, they are so illy adapted to the purpose that no property is so fruitful of litigation as quartz mines. Few among them of any value but are already subjects of lawsuits; and law in this region is a frequent necessity that involves the most serious expenses. Placer or gulch claims give one the right to work a well-defined area, 200 feet up and down the gulch, and as far up the slopes on each side as the deposit may extend, the claim being limited to the width of 200 feet. This whole area is for a time the exclusive property of the one taking possession of it, to work in any manner he chooses. The gold he is in search of he finds under the soil and gravel, lodged on the surface of the "bed rock." Having obtained all he can in one or two seasons, he has no further interest in the claim, which he abandons to seek another elsewhere. He wishes no title to the soil, and would oppose any provision for making private property of unworked deposits of this kind. It is a sort of property that it would doubtless be impolitic for the Government to dispose of, though under the present system no direct revenue is derived by the Government from it.

Quartz claims give one a title to 200 feet along the outcrop of a vein, and down its slope indefinitely; also, the surface right of 50 feet each side the outcrop, provided no other vein is found within 100 feet, in which case each vein is entitled to the use of half the space between them. This provision is almost wholly imperative in practice. No mine can be exclusively worked with its surface operations hemmed in to a width of 100 feet, without regard to the shape of the ground and the lay of the vein. If the vein be of gentle dip, it may be necessary to sink a succession of shafts in order to reach it at different depths; and the surface on the outcrop may be too rough or steep for surface work. The lodes seldom being visible along the surface, their position cannot be defined like the gulch claims, and when allotted in a succession of 200 feet lengths, it may be several years before their range is accurately ascertained, even if active operations are carried on upon some of the claims. These mineral veins do not run in straight lines, nor always parallel to each other. In direction or dip they may run into each other, and one may learn, after the expenditure of much time and money in a fair mining adventure, that he has been employed upon something emanating from an older recorded lode, duly staked as the law requires only at the discovery claim, which may be 1,000 feet off, and some idle speculator holding the claim covering the ground improved may step in and take possession. Notwithstanding the outcry against the sale of the mineral lands, it is unquestionably for the interest of the country that the quartz veins at least should be freed from a system of this kind, and all thrown open for actual development. Persons holding claims might be allowed a reasonable time to make a beginning of work upon them; but a failure to do this, or ceasing to work them for a stipulated time or to a certain extent, should cause their reversion to the Government. If not sold by the Government, a revenue might be derived from the recording fees, and this might also be obtained from the gulch and placer claims. It would be a great improvement if the "feet" system were abolished, and the quartz veins allotted upon a defined area, as the copper mining lands of Lake Superior have been sold.

FALSE ACCOUNTS—THE SOCIAL STATUS IN MONTANA—AGRICULTURAL.

From Our Special Correspondent.

MONTANA TERRITORY, May 1, 1866.

One is often reminded of the difficulty of obtaining correct information of distant places by the notices of this region in Eastern papers. Were all correspondents as correct as your own special correspondent, who so well observed and faithfully recorded his observations through the western mining regions last Fall, there would be little to complain of. But it is vexatious to have one's friends disturbed at the East by statements passing current of 200 men being frozen to death on the Sun River stampede in February last, when we never knew here of more than two who had thus suffered, and of a dozen or so who had frozen their feet. Then we read, on the first page of THE TRIBUNE of March 23, that "a vigilance committee is organizing in Montanna. It numbers 1,600 members, and is increasing. A perfect police system is maintained." All this is news to us who live here. We were under the impression that the vigilance committee was about "played out," to use a common expression of this part of the country, and that we were living under the protection of the law, though it is true a man is occasionally found suspended for some offense against society, which the law failed to punish. It is not so common now as it used to be, if one is missed in the morning, for his friends and relatives to seek first the gallows tree, just out from the town, if haply he might be swinging there. And as for the police, we regret that the perfect system spoken of is not maintained in a way that the people might be aware of it. Again, a correspondent of *The N. Y. Evening Post* (I think in one of the February numbers) spoke glowingly of this as a fine agricultural country, where "vegetables are already as cheap as in New-York."

MISSOURI.

THE COUNTRY AROUND ST. LOUIS—THE LEAD AND IRON REGION—HISTORY OF THE IRON MOUNTAIN GRANT—THE FURNACES—PILOT KNOB—FORTY TUNS OF IRON A DAY—WHAT IS WANTED.

From Our Special Correspondent.

DONGOLA, Illinois, June 7, 1866.

In visiting the mineral regions of Missouri I came to Iron Mountain and Pilot Knob. The country around St. Louis is desolate, the improvements are few, the farm-houses poor, the general scene is one of wretchedness. No other North American city is surrounded by a population so worthless. It is like an Asiatic city which owes its prosperity to caravans. St. Louis has not been built by Missouri but by Illinois. The magnificent country of the Illinois River and the Central counties of the Prairie State have laid the foundation of the two great cities of Chicago and St. Louis.

On leaving St. Louis by the Iron Mountain road one finds the cars crowded. Large numbers of young people come from the country to school and return home at night. After passing Carondelet, the arsenal, and the barracks, some ten or twelve miles there is plenty of room. The track runs on the borders of the river nearly 30 miles. Often the scenery is grand. Then the road strikes into the country in a south-west direction. Most of the stations are small, a few are very pretty, some are wretched. The soil seems rich enough, the timber is varied, and there are choice locations for farms. There are hills well adapted to fruit which recently have been planted with extensive orchards and vineyards. Almost all these improvements are made by Northern men. In a few years they will make it a beautiful country. The common price of land from one to two miles from a station is about $10 an acre. A large tract near Victoria, belonging to Gen. Grant, recently sold at auction for less than $5 an ac