CHAPTER VIII.

NORTHERN CALIFORNIA.

THIS part of the State is well entitled to more attention than it has received. The law of compensation which is found to prevail almost everywhere in this world is not inoperative here. In some respects northern California has the advantage over any other part of the State. In the first place there is not the same or an equal deficiency in the rain-fall, which in some places is double that in San Francisco, and is more equally divided in the times of falling. In addition to the reason assigned for a greater rain-fall in a previous chapter, there is a local cause which coöperates with the general one, at least in the counties bordering on the coast, namely, the prevalence of redwood forests, which have a remarkable power to arrest moisture and condense it into rain. These redwoods *(Sequoia sempervirens)* belong exclusively to the Coast Range mountains. Two conditions seem to be essential to their growth — the foggy regions peculiar to the Coast Range, and an underlying basis of metamorphic sandstone. They are not found where these conditions do not co-exist. From the northern part of the State down to Tomales bay, in Marin county, they form a continuous forest, increasing in width northward. The redwood, though less in extent than its half-brother, the *Sequoia gigantea*, or big-tree, has greater commercial value; indeed, in this respect it stands at the head of the list of California trees. A red-

wood tree twenty-five feet in diameter contains forty thousand cubic feet, and weighs two million five hundred thousand pounds. The shingles made from a single tree will load a schooner, and it is recorded that a man, after building his house and barn out of the lumber of one individual tree, had enough timber left to fence a garden containing two acres of land!

These trees grow to a height but little less than that attained by the other species of *Sequoia*. They grow two hundred and even two hundred and fifty feet high. The foliage is less like that of the cedar, and more like the hemlock, than is that of the big-tree. In those counties in northern California which border upon the sea, saw-mills are numerous, and the lumber-trade the absorbing interest. Humboldt bay, in the county of the same name, is the great center of this business. This bay, which is two hundred and twenty-three miles north of San Francisco, is the best harbor found between Puget Sound and the Golden Gate. "It is formed by two densely timbered peninsulas, which inclose a very handsome bay about twelve miles in length, and from two to five miles in width, its shores thickly timbered with magnificent pine and redwood to the water's edge. The entrance to this bay is about one-quarter of a mile wide, with eighteen feet of water at low tide."

Of these northern counties Humboldt is on many accounts the most attractive. It has a fine harbor, and the only one in northern California. Some of the finest redwood forests in the State are found here. It has water privileges, abundant and good, on the river of the same name, which runs across it. There is unused power suffi-

cient to turn any quantity of machinery. It has good grazing lands in abundance, which make wool-growing very profitable. There is scarcely a doubt that sheep will do better here than in any part of southern California. But, as an offset to these advantages, and to bring things nearer to an equilibrium, Shasta and Siskiyou will soon have a railroad running through them from south to north. The California and Oregon railroad is now finished and in running order to Fort Redding, in the southern part of Shasta county, and the parties who have it in hand are hurrying it on to completion. And where the railroad goes, there go, in its company, all the appliances of civilization. Locomotives and tenders ought to be reckoned among the tools for missionary operations; for they equalize the conditions of countries; they carry peoples and ideas, and scatter light wherever they go. Brigham Young set the seal to the destruction of the "peculiar institution" among the Mormons when he adopted measures for making a railway to connect Salt Lake City with the remainder of the world.

And yet there comes a doubt whether those who are whisked through northern California and Oregon by the iron horse will see as much beauty and enjoy as much as a certain person did who came through in a poor, uncomfortable mud-wagon, or a series of them, with four horses for locomotive power!

This ride was a part of an overland journey from Portland, and was made in the season of the year when the country looked its best, being arrayed in its autumnal garments. Enough rain had fallen to lay the dust effectually, and even convert it into mud in many places. The

deciduous trees had put on their yellow and brown and russet attire — a thing which they never do further south. The air was pure and exhilarating, as it always is after the rains begin. The day on which the journey was made down the great Sacramento cañon stands out in the memory as one of the whitest of white days. In all the many hundred miles of travel on the Pacific coast there was nothing like that!— no day the glory of which was equal to the glory of that, unless a day on the upper Columbia should be excepted. Let no traveler think that he has really seen California, and knows what it can furnish in the way of scenery, till he has followed the Sacramento river from its beginning near Mount Shasta down as far at least as Red Bluff, where it begins to be so much like other rivers — so orderly and manageable that it becomes navigable.

The Siskiyou mountains form the dividing line between Oregon and California part of the way. Soon after crossing these mountains we came to the pillar of stone, set up to show where Oregon ends and California begins. Before long we crossed the Klamath river, and then the Shasta, and were soon at Yreka, which is the northernmost town in the State. The name is not a corruption of the well-known Eureka of the old Greek, as might be supposed from its resemblance, but is the name of a tribe of Indians who formerly lived hereabouts. The town is situated on a plateau four thousand feet above the level of the sea, and is the center of quite a large trade, being the place of interchange between miners and those who furnish their supplies.

Within the last few months this town has come into notice as being the base of operations in the war carried on

for six months or more between the United States, with their immense military and every other kind of power, and about two-score half-starved and half-clothed Modocs, who made the lava-beds, not very far away, their high tower and place of refuge. We are now furnished with a new clause to our climax for Fourth of July use. We have conquered the British, the Southern rebels, and — the Modocs!

Poetic justice would seem to require that a hero who with a handful of followers could keep a great nation, with all its resources, at bay for so long should have other reward meted out to him than to be strangled with a halter!

One of the unpleasant things about the stage ride was the necessity of traveling by night. As but one stage started from Portland in the twenty-four hours, and the driving was continuous, there was no escape from night travel. Stopping by the way necessitated a twenty-four hours' delay, and the starting again at the same hour at which the stopping occurred. Hence it came about, "total depravity" being inherent in inanimate things as well as some animate, that the very places and things, the sight of which was most desired, were almost sure to occur when they had to be passed in the night.

In consonance with this fact, the nearest point to Mount Shasta was passed in the darkness of the night, at which time we went within seven miles of its base. This mountain is the crowning glory of the mountain system in northern California. It is the memento put up to show the place where the two mountain ranges, that have been approaching so long, at last effect their union. Mount

Shasta is fourteen thousand four hundred and forty feet high. Until recently it was supposed to be the highest peak in the whole Sierra Nevada range, but late measurements prove that Mount Whitney and other peaks in the southern part of the State outrank it. But it is doubtful whether any of them excel it in symmetry of outline and beauty of aspect. During the weeks that I was in Vancouver, always beholding the beauty of Mount Hood, it did not seem that any other mountain could surpass, if, indeed, any could equal it. But, like the unfortunate wight who could be very happy with either were "t'other dear charmer away," as often as I saw Mount Shasta I was divided in my allegiance. During the three or four months that I had previously spent in the Upper Sacramento valley one of my great delights was watching this mountain and seeing it in all its different aspects. When the sun was scorching everything, as it has a way of doing in that part of the valley, it was very refreshing to look up to this peak, which, with its white garments reaching away down as far as the eye could see, had so cool and quiet and placid an appearance. It seemed like a saint that is lifted above the strife and conflict of the world by a serene faith in the high and the pure. Although the mountain was more than one hundred miles from where I was, so pure was the atmosphere that it seemed quite near — so near that it would have been easy to believe it could be reached by an afternoon's ride. Looking at it from afar so long had created an intense desire for a more intimate acquaintance. Yet this chance must be lost, because we were to pass the nearest point in the night. As there was no help for this and no change

possible, the best thing that could be done in the circumstances was decided upon. The lower soda springs were only fifteen or twenty miles from the base of the mountain, so a stop was made there, in order that a whole day could be spent in viewing and admiring this snow-capped mountain.

But here again this same "total depravity" of things inanimate worked my loss. Waiting and watching all the livelong day, not one glimpse of the mountain was vouchsafed to my longing eyes—not the most indistinct vision of the outline. An uncomfortable drizzle, which was neither a good honest rain nor an ethereal mist that could be looked through, covered and concealed everything. It was an impenetrable veil that was as effectual in obscuring all surrounding objects as the darkness of night could possibly be. For such a misfortune there was no remedy within the reach of human might. So I turned from the impossible to the possible, and tried to find out what I could about the soda springs.

There are several in the immediate vicinity, differing from one another in the kind and degree of impregnation. Soda enters so largely into the combination in one spring that the water is used instead of yeast or baking-powder in the manufacture of bread. Flour mixed with it rises quickly and nicely. Some miners, who were digging for gold not very far away, had their cabin near this spring on account of the convenience of having this water with which to mix their bread. In one of the springs the water is so strongly impregnated with the alkali that if used unadulterated it gives the bread the yellowish-green look so well known to cooks as indicating too

generous a use of soda. The water of the spring most used for medicinal purposes is very pleasant to the taste, unlike most mineral waters. There is a little acidity in the flavor and a sparkle and freshness that makes it very acceptable. The proprietor of the springs is a regular Pike. He came from Missouri some twenty years or more ago, and has lived here ever since. He is some forty-five years of age, and never saw a steamboat or a railroad in his life! It was refreshing to see a man so totally unsophisticated—so unknowing in regard to the ways of the world—one who belonged so thoroughly to a past age, and had so much to anticipate; for not many months will pass before the iron horse will be running past his door, and waking the echoes that have slept so long with its loud snort. The Sacramento river here begins its long journey. It is so small and insignificant that a man could almost leap across it.

We started from the springs in the early morning, just in time to watch the signs and the miracles that attend the birth of a new day. How wonderful the sight would be if repetition had not made it familiar! First, a faint light appeared, the hills flushed, then brightened; soon the disk of the sun came up, and object after object took upon itself outline and form; then darkness fled away and everything was revealed. A new day had come! A new day, and one that was perfect! There was no flaw anywhere in the sky or the air. This was some compensation for the disappointment of yesterday. Mount Shasta looked its best; it could not possibly have made any finer appearance. What a day's ride that was which thus begun!

We passed Castle rocks soon after starting. These rocks

are formed by a spur of Trinity mountain, and are on the right bank of the Sacramento. This range rises twenty-five hundred feet above the valley, and has a ragged crest of pinnacles and spires of a grayish color. In many places the rocks bear a striking resemblance to castles, as we see them pictured. Sometimes they looked in good repair, then again they seemed as though time's busy fingers had dismantled them, and dungeon, warden and keep, all were gone. It did not require much stretch of the imagination to suppose that there had been days when there were giants in the land and these magnificent castles were their dwelling-places. There were turrets, minarets, spires and belfries; nothing seemed to be wanting; and these walls and battlements were of such a height as no knight in the olden time, when knights were valiant and daring, ever scaled or captured.

The Sacramento river, for the first hundred miles of its course, is a very unruly stream, and refuses altogether to be navigated by anything. Sometimes it goes along quietly, between its high banks and under the shadow of great trees, as though it were nursing itself and gathering strength for some conflict soon to come; then it boils and bubbles and tosses and fusses among the rocks and obstructions that come in its way. Sometimes it is required of it to make its way through mountain passes, which it does fearlessly, leaving banks along the gorge that it makes one dizzy to look down from. Having performed a feat like this, it runs on for miles, making long elbows and many angles, as though it were not in the least bit of a hurry, but had plenty of time to play if it chose, or cut up any caper that chanced to come into its head. All the hill-sides

and mountains were covered with trees, the deciduous ones, not yet in "the sear and yellow leaf," but arrayed in those gorgeous dyes which they, as if preparing for their apotheosis, assume before their departure. There were enough evergreens among them to answer for a background, of which the deciduous trees were the foil and ornamentation. With every variety of surface, hill, dell, mountain and valley, abrupt peaks, shaggy and awful, gorges deep and mysterious, each change coming without preparation, and often without anything to give even the keynote to the approaching entertainment,—it was a day of gracious surprises and the most intense enjoyment. Then, in the distance was always Mount Shasta, grand and lonely, with its head and sides covered with snow away down as far as the eye could see. The clear sun shining upon it made it almost too glittering for the eye. Sometimes there were clouds resting midway between the top and the base, while the summit loomed up clear and bright above all the mists and obscurities.

When the day was waning and the light already so dim that surrounding objects were to some extent obscure, we came near to some high hills or mountains that were very striking in their appearance. They were white and destitute of vegetation. We saw them for a long time; for, in going through a cañon, in order to avoid going over them, the road made almost their entire circuit. Professor Whitney describes them as "the Gray mountains, sometimes called the Marble mountains, a range that stretches along the east end of the Cloud river. Some of the points are three thousand feet high." When the railroad reaches them, and transportation becomes possible,

these mountains, or considerable parts of them, will probably go to San Francisco, to make marble fronts for banks and up-town residences, where millionaires will hold their courts and keep Chinese boarding-houses in their kitchens!

Darkness covered the land before we came to Pitt river, which we crossed in a ferry-boat. This stream rises on the east of the Sierra Nevada mountains, coming out of the southern end of Goose lake with quite a parade of noise and confusion. It has enough force, by the time it gets to them, to make its way through the mountains, and then flows in a southeast direction till it unites with the Sacramento, to which it not only gives itself, but, woman-like, its name also, although much the larger river of the two, imitating, in this respect, the illustrious example of the Missouri, which yields its title and its individuality to the lesser Mississippi. We crossed the Pitt river not far from its junction with the Sacramento. Although not very wide, it is said to be absolutely unfathomable. With a courageous moon, that was full and evidently determined to do its best to make up for the absence of the sun, our ride continued to be pleasant far into the night. A soft glamour was cast over everything; outlines were revealed, and the imagination allowed to fill in as it chose. The country is such as is generally found skirting the Sierra Nevada mountains. It is but little broken, and much of it is entirely level, with grand old oaks scattered here and there, as though nature had undertaken to show what was the highest type of a landscape garden.

The road was smooth and good, and we traveled on without let or hindrance. The only decided sensation experienced was when we drew near to a spot about twenty

miles north of Red Bluff, where the stage had been robbed thrice within a short time. It is a point where the road from Shasta comes into the one on which we were traveling, and the gold brought over both routes is put into the same coach. The robbers had, in all three cases, been careful of the feelings and convenience of the white passengers, and had not molested them, being satisfied with taking the express-boxes and relieving the Chinamen, when there were any, of their surplus capital. But it was not certain that such a state of mind was immutable among the robbers, and it was not quite pleasant to be at the mercy of the whims and oddities of men so lawless and irresponsible. However, being by a chronic fatality a member of that class of travelers who are proverbially easy *coram latronibus*, the quiet of the occasion was not greatly disturbed, at least in the case of the individual whose welfare was nearest the heart of the writer. The dangerous place was passed in safety, and at three o'clock in the morning we drew up at the Tremont House in Red Bluff.

Our stage-ride was over; the railroad was now at our service. That there was fatigue connected with the ride was beyond dispute, but there had been ample compensation for all unpleasantness in the increased acquaintance with the country and the enjoyment in seeing much that was strange and beautiful.

Mount Shasta deserves a fuller description. Standing as it does, with its head not much less than three miles above the valley in which it is situated, it looks even higher than it is because of its isolation. There is no other peak near; it stands solitary and alone, the crowned "monarch of all it surveys." The ascent of the mount-

ain is difficult, but not hazardous. At the base the mountain is covered with trees, which continue to grow until the altitude of from four to seven thousand feet is reached. Some of these trees are immense pines six feet in diameter and two hundred feet high. The sugar pine is the grandest of them all. After reaching the height of eight thousand feet these large trees gradually disappear, but there is a species of pine that continues to grow for still another thousand feet. After that there are no signs of vegetation except the red snow.

Quite recently a weather-signal has been erected on the summit of the mountain, under the direction of the Federal Coast Survey.

CHAPTER IX.

A RANCH IN THE UPPER SACRAMENTO VALLEY.

DESCENDING from generals to particulars sometimes clears our ideas. The mind interests itself more readily in and takes more kindly to an individual than a species. Instead, therefore, of a general description of the Upper Sacramento valley, a particular account of a ranch will be given. As the writer spent three or four months upon a certain one, there was opportunity to become thoroughly acquainted with the minutiæ of its management. These California ranches, consisting, as they often do, of many thousands of acres, are conducted on a scale of magnificence that would quite astonish practical farmers in other parts of the country.

The word ranch is a memento of the early Spanish occupancy. There are many of these reminders all over the land. The names of mountains, towns and rivers are frequently derived from the same language. Oftentimes they are corrupted by English use, as is the case of this one, which is a hybrid, but, as such, current everywhere, together with its derivatives. Farm-hands are called ranchmen. A man is ranching horses when he takes them to pasture.

The ranch in question is located in the Sacramento valley, near Red Bluff, which is at the head of navigation on the Sacramento. It is in Tehama county, on the east side of the river. The ranch was originally a Spanish

grant, but had passed through two or three hands before coming into the possession of the present owner. It contains sixteen thousand acres, in all of which there is scarcely a rod of waste land. The valley here, as elsewhere, reaches from mountain range to mountain range — from the Sierra Nevada on the east to the Coast Range on the west, and is at this point from thirty to forty miles wide. Both ranges of mountains can be clearly seen in the winter and early spring, when the atmosphere, purified by the rains, is transparent, reaching up their snow-capped heads to the skies, making it oftentimes difficult to tell where the mountain leaves off and the heavens begin. As the season advances the snow melts from all the peaks except Lassen's Butte and Mount Shasta. This last mountain is the loftiest in the northern part of the State, being over fourteen thousand feet in height. Although it is more than one hundred miles north of Red Bluff, looking at it through the clear atmosphere it seems to be a near neighbor, and it would be easy to believe that a pleasant morning-ride would take one to it. It is a grand and refreshing sight on a summer's day to view its cool and quiet demeanor as it looms up in the distance, clad in purest white away down as far as the eye can see, its head serenely lifted above the heat and dust that oppress and envelop all below it. "Like a great rock in a weary land," it seems to invite all to come and take refuge beneath its shadow.

There exists in this locality a peculiarity which is often observable among the foot-hills of the Sierra Nevada mountains. The land is neither timber-land nor prairie, but is park-like, there being scattered here and there

the grandest oaks that ever delighted the eye or made glad the heart. They have the graceful sweep of the New England elm and the magnificent size that the rich soil of California enables them to attain. There is now and then a live-oak to be seen among them, as if to make a little variety. The trees are not so thick as to be serious *impedimenta* in the cultivation of the soil, which is often carried on without felling them. There seems to be good reason for the opinion that this whole Sacramento valley was once a vast lake, inclosed between the two ranges of mountains. Some great convulsion, of which there was no witness, or at least none remaining to tell the tale, opened the Golden Gate in the Coast Range and let the waters flow out until none remained except in the more depressed parts, and then there remained but the valley and the river.

The ranch extends about four miles along the river. The abundance of water which it possesses is one of its best peculiarities. There is not a field in the whole ranch through which there does not run a living stream. These rivulets come down from the mountains through cañons in the foot-hills, growing in size as they run along till they get to the valley, when they wind about here and there gladdening the earth and giving drink to the thirsty cattle as they, rejoicing, go on their way to seek the river. There is a flouring-mill of large capacity on the ranch, the wheels of which are kept running by a never-failing supply of water furnished by one of these streams.

Between three and four thousand acres are sown with wheat and barley. The machinery used in harvesting the grain works so fast that twelve hundred bushels of wheat,

that in the morning hold their golden heads erect in the field, in the evening find themselves tied up in sacks ready for the mill.

The grain is cut with "headers," which are driven through the field, and cut the stalks about six inches below the head. Each header is accompanied with a train of three header wagons. The wagon is built with one low side, and is driven along with this side so close to the header that the grain is thrown into it as fast as it is cut. When one wagon is filled another is driven up, which in turn gives place to another, and so on in perpetual rotation. These header wagons take the grain directly to the steam thresher, which is driven about to convenient places in the field. The whole process of threshing, cleaning, etc., is gone through with on the spot, and the grain is at once put into sacks. The wheat is so dry that no process or delay is required to prepare it for the market. Being put into sacks, it is left on the field a month or more if need be, until it is entirely convenient to make some other disposition of it. There is no danger of a sudden shower to occasion hurry in getting in the grain. There is no fear of rain before the farmers' eyes all through the summer months. Monsieur "Probs" would have an easy berth of it in that region. The sky never leaks in harvest time. Fifty acres per diem is the average amount cut through the entire season of harvest. To carry on these operations a force of forty horses and about thirty men is required.

The process of putting in the grain is managed as follows. Plowing is commenced as soon as the rain begins to fall. This does not occur until late in November, or oftener in December. Fifty horses or mules and about

EL CAPITAN. (3,300 FEET HIGH.)

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twenty men are employed from that time until March, clearing the fields, plowing, sowing, harrowing and going through with the various processes connected with planting. All of the machinery and implements are of the best. The old-fashioned plow, that a man was compelled to hold fast with both hands in order to make it "toe the mark," is altogether discarded in this enterprising and progressive country. No plow is used that does not at least cut two furrows, and many cut three. Buggy and sulky plows, in which a man may ride in a very gentlemanly way, are in use, and they often cost one hundred dollars. From four to six, and sometimes even eight, horses or mules are attached to each. When a half-dozen of these teams are driven in at noon or night, and released from harness, they easily suggest the disbanding of a small army. The plowing does not always cease with the putting in of the grain. Hundreds of acres are plowed so as to be ready for sowing before the fall rains begin. This is called "summer fallowing," and is the surest way to secure a good crop. These fields are "cultivated in;" that is, the grain is put in with a cultivator, which can be done at any time during the summer or fall, when convenience makes it desirable; for nothing will harm the grain while it lies on the ground. It stays there, safe and sound, waiting for the rain that will come in the late autumn and make it spring up. It will then have the whole period of the rains in which to grow, and by the time they are over it is too far advanced toward maturity to be harmed by their discontinuance. As the rains sometimes delay their coming until late in December, where so much ground is to be plowed, it is difficult to plant all the grain in the ordinary way in

time for it to pass beyond the danger from drought before the rains cease. Oftentimes a field is "cultivated in" after harvest, without replowing, and a very good crop secured.

Labor is expensive. Men receive thirty dollars per month and board for ordinary service. In haying and harvest time there is an advance upon this price of from fifty to one hundred per cent. At these prices men are plentiful, though they are not the best specimens of the article. Many of them are men who have been worth their thousands of dollars, made in the mines; but by some move of the capricious goddess their dollars have vanished, and they are compelled to work for their daily bread. "Jail-birds," too, not unfrequently light upon the ranch and remain stationary for awhile.

The supply of laborers is generally quite equal to the demand, and sometimes considerably exceeds it. No arrangements are made for lodging them. Each one furnishes himself with a pair of blankets, which he carries about with him, and he has a wide range for selecting a place where he will spread them and lie down to his rest. The barn, the tool-house, the blacksmith shop, the granary, are all open to him, and he can decide where to choose at his leisure. If none of these places suit him, he can lie down under the spreading branches of an oak and have the sky for his coverlet.

On this ranch the men have their quarters in a house at a little distance from that of their employer, where a Chinaman, hired for the purpose, prepares and dispenses meat and drink. Five hundred tons of hay are cut in a season. This hay is not timothy or clover, but wild oats, which grow luxuriantly in all the region. No preparation of the field is

necessary, no plowing, no sowing; the oats grow of their own accord, and ask no pay for doing so. Even though a field may have been tilled for years, if it is left vacant for a season, instead of growing up to weeds and briars, as is the naughty fashion in less favored lands, wild oats, which seem to have been lying in wait all the time, are ready to spring up and offer a fine harvest of hay of the best quality. The oats are cut before the grain is ripe enough to shell out in handling. Before the country was settled and the land brought under cultivation these wild oats grew everywhere very luxuriantly, thus furnishing such pasture for sheep and cattle as is not often found.

Six hundred head of cattle board themselves on the broad acres in parts of the ranch not under cultivation. These cattle require no attention in summer or winter, except that two men, called vacqueros, a Spanish word meaning herdsman, are employed to ride around and see that they, in common with the hogs and horses, behave themselves with a due regard to propriety; that they throw down no fences and break into no fields. There are between forty and fifty miles of fence on the ranch.

Twelve hundred hogs find themselves subject to the inexorable law, "Root, hog, or—die!" They are most ungainly, villainous-looking creatures. They have not the fear of man nor any other fear before their eyes. They have evidently come from ancestors that were accustomed to look out for number one. They abound in that valuable quality, self-reliance, which makes them desirable. The smooth, unctious, aristocratic-looking Chester whites are not tolerated on the ranch. They were tried and found wanting in the tact and energy needful for digging soap-

root and other esculents hidden in the ground, as well as in a general understanding of the ways and means of taking care of themselves. These hogs are driven in from the fields and slaughtered for the market without any preliminary feeding by way of preparation. They are brought from their range in the green fields, and without warning hurried to their fate.

Fourteen thousand sheep, under the care of shepherds, crop the grass at their leisure, and at no season of the year require shelter or feeding. There is a shepherd for each two thousand sheep. He keeps an eye on them during the day to see that they do not wander away, and at night gathers them into a corral, or some protected place, near which he sleeps in a tent or cabin. These sheep are not expected to be all pastured on the ranch. A part are kept on unoccupied lands, and in the summer, when the pastures wither and dry up for want of rain, they are driven to the mountains, where they are watched and cared for by the shepherds.

Sheep-growing is a very profitable business in this region. The increase is very rapid; from eighty to one hundred per cent. per annum being safely calculated upon, with good care. With wool at present prices sheep easily net two dollars per head. In this part of the State it is customary to shear twice in the year; the first time in April, the second in August. The fall clip averages from half to two-thirds as much as the spring.

No kind of animal is ever sheltered or fed except the working horses. These are kept on barley and hay. Between three and four thousand bushels of barley are fed in a season. No Indian corn is raised, except for table use,

and that is irrigated, as indeed all the garden and orchard must be. The rains cease too early for these products to be matured without artificial irrigation. No potatoes are raised; the supply is bought in Red Bluff, and is generally brought thither from Oregon. Although so many cattle roam over the pastures, not a pound of butter is made on the ranch; that, also, is bought in Red Bluff. A single cow furnishes milk for family use. By so much is this household better off than many others, for oftentimes, while hundreds of cattle are raised and kept on the ranch, coffee and tea are drunk unblessed with cream.

The winters are very pleasant. Although there is more rain than farther south, there are many days, and sometimes even weeks, in succession when there is but little or none, when the sky is clear, the sun bright, and the air pure and exhilarating. But in summer the heat is intense. The mercury goes up to 112°, 115°, and even to 118° and 120° in the shade. The women and children, and all that can, migrate to cooler regions. Many persons have summer-houses in the mountains, twenty or thirty miles away, to which they flee for comfort and safety. Others go to "the bay," as they always say in speaking of San Francisco, and remain there through the two or three hottest months. The intense heat and luxuriant vegetation have the effect to produce malaria, which generates chills and fevers. These ailments are not at all uncommon in this region.