



### Sheep Raising in California.

The business of sheep raising and wool growing in California, is attracting much attention, and the public journals throughout the State speak of it as promising to become one of the principal sources of wealth to the agricultural portion of its inhabitants, at no distant period, although wool does not, this season, command high prices, some seventy thousand pounds having been sold recently in San Francisco, for export, at prices ranging from fourteen to thirty cents per pound.

Among the principal sheep raisers of the State, is mentioned Mr. R. Blacon, of Alameda county, famed also for his admirable herds of dairy stock. It is stated that, in July, 1860, Mr. Blacon purchased sixteen Merino ewes, of which two died on shipboard and two are barren, leaving twelve breeding ewes, from which he has an increase of forty-six, with the anticipation of another crop of lambs before next July—something over three hundred and twenty-five per cent. increase in less than two years. The shearing is as follows:

62 clips from ewes and ewe lambs	877½ lb.
8 clips from bucks	81½ lb.
General average of ewes and ewe lambs	16 lb. 14 oz.
General average of bucks	27 lb.

The heaviest fleece taken from the best flock, was thirty-four pounds; and from the best ewe, twenty-five and a half pounds.

**Trees for Shade.**—The California Farmer suggests that in place of the cottonwood, which in bursting its bolls fills the air with feathery particles, agriculturists should substitute the graceful elms, the fragrant locust, or the beautiful waving Eucalyptus, which, with many other trees, are far preferable to the cottonwood.

### How the Chinese make Dwarf Trees.

We have all known from childhood how the Chinese cramp their women's feet and so manage to make them "keepers at home," but how they contrive to grow miniature pines and oaks in flower-pots for half a century has always been much of a secret. It is the product chiefly of skillful, long-continued root-pruning. They aim, first and last, at the seat of vigorous growth, endeavoring to weaken it as far as may consist with the preservation of life. They begin at the beginning. Taking a young plant (say a seedling or cutting of a cedar), when only two or three inches high, they cut off its tap-root as soon as it has other rootlets enough to live upon, and replant it in a shallow earthen pot or pan. The end of the tap-root is generally made to rest on the bottom of the pan, or on a flat stone within it. Alluvial clay is then put into the pot, much of it in bits the size of beans, and just enough in kind and quantity to furnish a scanty nourishment to the plant. Water enough is given to keep it in growth, but not enough to excite a vigorous habit. So, likewise, in the application of light and heat. As the Chinese pride themselves also on the shape of their miniature trees, they use strings, wires and pegs, and various other mechanical contrivances, to promote symmetry of habits, or to fashion their pots into odd fancy-figures. Thus, by the use of very shallow pots, the growth of the tap-roots is out of the question; by the use of the poor soil, and little of it, and little water, strong growth is prevented.

Then, too, the top and side-roots being within easy reach of the gardener, are shortened by his pruning knife, or seared with his hot iron. So the little tree, finding itself headed on every side, gives up the idea of strong growth, asking only for life, and just growth enough to live and look well. Accordingly each new set of leaves become more and more stunted, the buds and rootlets are diminished in proportion, and at length a balance is established between every part of the tree, making it a dwarf in all respects. In some kinds of trees, this end is reached in three or four years; in others, ten or fifteen years are necessary. Such is fancy horticulture among the Celestials.

### Training Pear Trees.

Mr. Amos Fish, of Bethlehem, N. Y., in a communication to the *Cultivator*, gives the following as his method of training pear trees:

I have at times transplanted young pear trees grown by budding or grafting on stocks having strong roots, or others that have been trimmed up when growing in the nursery, and having in consequence long, slim stems. The roots of these trees having lost many of their fibres by transplanting, were unable to counteract the influence of the sun's rays, beating powerfully upon the stem, which causes al-

most a stand-still in the growth. In case, therefore, of shoots appearing upon the stem, (the nearer the ground the better,) I suffer them to remain, shortening them in after the first year, to increase the thickness of the foliage near the ground and aid in the growth of root until the roots and the stem near the ground are sufficiently strong in proportion to the height of the tree. I then cut them off, covering the wounds with grafting wax. By this treatment the tree will grow more vigorously, and time will be saved in bringing it into bearing.

**Heavy Cattle.**—H. Patrick, the successful cattle feeder of Dupage county in Illinois, has recently marketed fifty head of steers, which netted him, dressed, an average of seven hundred and thirteen pounds. The price paid was a little better than three cents live weight. They were packed at Hough's packing house, and pronounced the heaviest lot of that number ever packed there—the highest average heretofore having been six hundred and forty pounds.

**Tobacco Culture in California.**—Mr. J. P. Bainbridge, who resides some distance below the town of Colusa, says the *Sun*, near the Sacramento river, has commenced the cultivation of tobacco on his land. He contemplates putting in about ten acres. Tobacco is one of the articles in the list for the production of which the law provides a premium, and it is one of the articles, too, that we are satisfied can and will be profitably cultivated in California.

### The Pimo Indians and Villages.

A soldier in Col. West's detachment of California Volunteers in a letter from camp, near the Pimos villages, to a friend at San Francisco, dated May 5th, published in the *Bulletin*, gives the following description of the desert and the Pimo Indians and their villages:

Of course in going into a new country, as I have from Fort Yuma to this place, I have seen new sights. From the fort up the Gila river, we had ten days marching (184 miles) through a wretched country. Multitudes of wild mocking-birds, singing night and day, were the only redeeming feature, but more than offset by any number of rattlesnakes, scorpions, and tarantulas. Then, as an object of melancholy interest, we passed the very spot of the Oatman massacre, and stood over the graves of the victims. It is desolate indeed, and I found it impossible during my stay there over night to keep my thoughts from dwelling upon the terrible tragedy.

Poor as my descriptive powers are, they will be little taxed to give a picture of the quite noted Pimo villages. The whole population, the Maricopa and Pimo nations, are said to embrace some six thousand souls. They are a peaceful and intelligent people, engaged in agricultural pursuits. Their warlike avocations consist of an annual campaign against the Apaches, with whom they are eternally at war. They have received some encouragement from the United States Government in cultivating their lands. They now have a crop of wheat on the eve of harvest that I judge will yield one million pounds. They live in low, oblong, round-topped mud huts, with a small door; these doors all face to the rising sun, and they have a traditional belief that some morning Montezuma will make his appearance with the God of day. They have no religious creed or form or object of worship that I am aware of.

The men are an idle set; the women do all the labor. The latter are modest for Indians, and have the reputation of being entirely virtuous; but I should judge from appearances that they will not long withstand the love-making of the California Volunteers. Among them are some fine forms, a simple clout of cotton cloth around the loins merely answering purposes of decency, while the rest of their persons are exposed in utter nakedness. They wear a profusion of beads, daub their faces with vermilion, and the eyelids and corners of their mouths with blue paint. They carry loads of wheat of one hundred to two hundred pounds in baskets upon their heads and shoulders, sometimes with a piccaninny accoutrement, strapped to a board, that regales itself at the maternal fountain. The aged of the race, both of men and women, are hideous. The young are lively, boisterous and playful as so many school children at liberty. On the whole, though infinitely superior to any Indians that I have seen, they are a benighted race, exciting only feelings of compassion for their barbarism, and disgust at their personal appearance and habits.

But their wheat fields are an oasis in the desert. The land is a light alluvial clay, and the Gila river through numberless ditches affords the necessary irrigation. Brush fences divide them up into fields of three to twenty acres, according to the number of families concerned in the cultivation of each.

While I write, as far as the eye can reach, the tall grain waves its emerald green in the gentle wind, and when a few weeks shall have given it full maturity, the golden hues of the ripened stalks will have a grand effect. Then, if it should be our fortune to still be here, doubtless we shall see a busy harvest time.

—“Cuffy, why don't you kick that dog?”  
“What am de use ob kicking ebery cur dat snarls at you? Don't yer know dat am de way he wants to bring hisself to notice?”

### The Darien Ship Canal.

The preparations are nearly completed for the consummation of that grand enterprise for connecting the waters of the two great oceans in attempting a survey for which Lieutenant Strain and a number of American officers and Government employees so nearly lost their lives. The present expedition is under the auspices of the Emperor Louis Napoleon. Several French engineers, under the direction of M. Bonardiol, having previously made a partial exploration, are operating in Darien upon a detailed survey of the line for a ship canal between the Atlantic and Pacific Oceans. There is, thus, at length, a prospect of this grand project being carried into execution. The line about to be surveyed extends from the Gulf of San Miguel, on the Pacific, in a direction N. E. by E. by compass, to Caledonia Harbor and Port Escoques on the Atlantic. The Gulf of San Miguel receives numerous rivers, the largest of which are the Tuyra and the Savana, which unite together just before falling into it. The Savana is navigable for the largest ships up to the confluence of the Lara with it, that is, for fourteen miles towards the Atlantic. From the confluence of the Lara with the Savana, at which point the future canal will commence, the line extends to the Chuquanaqua, a distance of 12 miles. From the Chuquanaqua the line follows the bed of the Sucubti, one of its tributaries, up to the confluence of the Asmati with the Sucubti, a distance of nine miles; and then continues along the bed of the same river Sucubti to a point nine miles higher up. From that point to the Atlantic the distance is six miles. The whole length of the projected canal will therefore be 35 nautical, or nearly 41 English miles.

The importance of this enterprise to the interests of commerce is immense.—[California paper.]

### The Roman Catholic Doctrine of Dueling.

Dr. Dixon, the Roman Catholic Primate in Ireland, has issued a thesis on this subject. It is published *apropos* of the recent challenge by the O'Donoghue to Sir Robert Peel, and appears in the shape of a letter dated Armagh, March 19th, addressed to the editor of a newspaper. We extract as follows:

I speak of Catholic duelists as such; that is to say, I speak of them precisely in their character of duelists—in other words, I speak not immediately and directly of the person but of the act. Having promised these observations, I now assert, without the least fear of being contradicted by any one who understands the doctrine and practice of the Catholic Church—

1. That a Catholic duelist, as such, must be held in abhorrence by every one who loves our Divine Lord, by every one who hates mortal sin and has a due horror of an act whereof the Holy Church of God has an exceeding great horror.

2. That the Catholic duelist, as such, proves himself to be in reality a coward, according to the true Christian meaning of the words cowardice and heroism.

I am, dear sir, your faithful servant,  
JOSEPH DIXON.

**WHAT IS FIRE?**—Boerhaave distinguished fire into two kinds—elementary fire, as it is in itself, and culinary fire, as joined with other bodies, and excited by the former kind of fire in combustible matter. According to him, the first effect of elementary fire is heat. Heat is inseparable from fire. The measure of heat is always the measure of fire; and that of fire, of heat. The second effect of elementary fire is the dilatation of all solid bodies and the ratification of all fluids. On cooling again, it contracts and returns successively through all the degrees of its dilatation till it arrives at its first bulk, being never of the same magnitude two minutes successively. Gold, when fused, takes up more space than before; mercury, placed in a narrow tube over the fire, will ascend to 30 times its former height.

If, in a severe winter's day, we rub a plate of gold briskly against another gold plate, they will both gradually grow hotter and hotter, until at length they become red-hot and at the point of melting; and yet all this time the plates lose nothing of their weight, but swell and grow bigger in all their dimensions. Hence it follows that the particles of the gold have not converted the friction into fire. The fire existed before, and all the effect of the friction is to collect and bring together a quantity thereof, before dispersed throughout the atmosphere. There is no making or producing of fire *de novo*. All we can do is, if insensible, to render it sensible, to collect it out of a greater space into a lesser and to direct and determine it to certain places.—*All the Year Round*.

**NEW CATECHISM.**—First class in philosophy stand up.

Thibits, what is life? Life consists of money, a horse, and a fashionable wife.

What is poverty? The reward of merit genius receives from a discriminating public. What is religion? Doing unto others as you please, without allowing the return of the compliments.

What is fame? A six line puff in a newspaper.

### Governments in France for the Last Seventy Years.

The following extracts from the *Gazette of France* presents in a succinct form some curious information:

In a period of seventy years France has seen 13 Governments, each differing from the others in origin and in aim. Louis XVI. and the Assemblies, May 5, 1789, to August 10, 1792; the Convention, with its revolutions and incessant changes, September 24, 1792, to October 5, 1795; the Directory, October 5, 1795, to November 7, 1799; the Consulate for a limited period, December 24, 1799, to August 2, 1802; the Consulate for life, August 2, 1802, to May 18, 1804; the Empire, May 18, 1804, to April 2, 1814; the Restoration, April 24, 1814, to March 20, 1815; the Empire, March 27, to June 22, 1815; the Restoration, July 8, 1815, to August, 1830; the Government of Louis Philippe, King of the French, August 9, 1830, to February 24, 1848; the Republic, February 26, 1848, to December 2, 1851; the Presidency for 10 years, December 20, 1851, to December 9, 1852; the Empire, December 9, 1852. During the same period of 70 years there have been promulgated 12 Constitutions, which have had in France, for a longer or shorter period, the force of fundamental law: The Constitution of September 14, 1790; the Constitution of June 24, 1793; the Constitution of the 5th Fructidor, year III.; the *Senatus Consultum* of the 16th Thermidor, year X.; the decree of the Senate of the 28th Floreal, year XII.; the Charter of 1814; the additional Act of 1815; the Republican Constitution of 1848; the Constitution, put forth by the President, of the 14th-22d January, 1852; the same Constitution modified by the *Senatus Consulta* of November 7th, 1852, and the plebiscitum of January 21st-22d, 1852.

### An Old Kentucky Nigger.

Davy's mistress sent him to market for some salsify, a delightful vegetable not much known at the North. He returned with a bundle of sassafras roots. "Why, Davy, I told you to get me salsify, and you have brought sassafras!" Davy scratched his head, and stammered out, "Missus, me think sassifas and salsify pretty much two things!"

Uncle Davy, some time afterwards, came to his master, who lived a few miles out of Louisville, and asked him to allow him to go and live in the city, at which his master was very much surprised.

"Why, Davy, what on earth do you want to go and live in town for?"

"De church wants me, Sir."

"What can the church want of you Davy?"

"Well, massa, me will explain. De church has sent away down to Virginny for my pedigree, and dey say I'm one of the fus families in Old Virginny, and dey wants to buy me for a pasture or a sextune, or some such thing: let me go, massa?"

Davy's master thought he had better stay on the farm a while longer before taking orders.

### New Reading of the Scriptures.

Mr. M., of Moline, Illinois, has been a kind of preacher for some years. He at length got the notion that it was wrong to make any preparation for his sermon, believing that his duty required that he should trust to the inspiration of the moment.

One Sunday when he was to preach at Moline, he walked into the pulpit and opened the Bible, as was his custom at random. He happened to open to the first chapter of Matthew, and began to read the second verse as follows:

"Abraham forgot Isaac; and Isaac forgot Jacob; and Jacob forgot Judas and his brethren."

The old man seemed somewhat puzzled to find any application for this Scripture, but at length started ahead.

"My friends," said he, "this passage of Scripture is meant to teach us the shortness of human memory, and it dose seem to me that them old patreaks was mighty forgetful."

**THE ART OF LAUGHING.**—The man that laughs is a doctor without a diploma; his face does more good in a sick room than a bushel of powders, or a gallon of bitter draughts. People are always glad to see him—their hands instinctively go half way out to meet his grasp, while they turn involuntarily from the clammy touch of the dyspeptic who speaks on a groaning key. He laughs you out of your faults, while you never dream of being offended with him, and what a pleasant world you are living in, while he points out the sunny streaks on its pathway.

**PHOSPHORESCENCE.**—Recent investigations instituted by Baron Von Reichenback tend to prove that phosphorescence is a usual consequence of all molecular action, and not merely the result of combustion or oxidation. Mr. Phipson proved the last point some time ago, when he showed that dead fishes shine in the dark, even under water, and in the absence of oxygen. According to Von Reichenback, there is phosphorescence during the fermentation or putrefaction, crystallization, evaporation, condensation of vapours, the production of sound, and the fusion of ice! A considerable glow is remarked when a galvanic pile is in activity, a block of ice in fusion, or a solution of sulphate of soda in the act of crystallizing is observed in the dark.