THE WORLD-RENOWNED BIG TREES OF CALIFORNIA.

The first feeling of every visitor to the Grove is disappointment. Two trees of no extraordinary size, when vivid imaginations are taken into account, guard the carriage entrance to the hotel. These, with a little dome-shaped summer house on a giant stump are all the exceptions to an ordinary pine forest. A pretty white house, beautiful lawn enclosures, etc., in front, or simply suggestive of the sweetest country quiet and comfort. The aroma of the pine and the soft rustling of whispering boughs are more than the imagination bargained for, and the soul is satisfied to drink in beauty, minus sublimity. But we all believe in trees, particularly do we, the denizens of San Francisco's sand hills, regard them as a necessary expression of nature.

The view of the magnificent oaks and other perfect species that so beautify the land near Stockton had increased the keenness of the tree appetite. But I confess I feared my limit to tree grandeur had been reached long ago. All forests are grand, and when I viewed them in the valley of the Juniata, and from Alleghany's hights, I thought nothing could exceed. Then came the avenues of New England elms, and adoration took the place of admiration. Next came the giant cypress, branch deep in the amber waters of the dismal swamp, each point of surface trailed with vines and dank, green mosses, among which glided bright-eyed, spotted lizards, and sombre evil-spirited birds. Terror over-topped admiration and adoration, and in all my longings for a vagabond life with nature there came no wish to paddle my light canoe by a fire-fly lamp through such regions. And later still, in Carolina's groves of live oaks, thought surely the *ne plus ultra* must be reached.

Imagine six regular lines of these giant monarchs, each line a quarter of a mile in length, the trees two hundred feet apart, the bare, brawny, skeleton branches stretching nearly horizontal and almost meeting. All these otherwise naked limbs draped and garlanded with soft, grey moss, that trailed yards and yards and swayed with every breeze. For canopy to the mighty rafters of this great cathedral, a close growth of shining evergreen foilage. Never did my soul so flow out in libations of worship as now, when the whole inspiration of gothic architecture opened to my eye, and I felt what the poetry of savage nature, untamed by civilization, must be, that could give semblance of that cathedral.

"Boundless as our wonder,
Whose quenchless lamps the sun and moon supply,
Its choir, the winds and waves;
Its organ, thunder."—

No, no, it would be mean to ask more, and I came to the mammoth trees only to add a massive border to an already completed gallery of pictures. Ah, me! usually we mortals feel of the earth, earthy; but I did believe man was little lower than the angels when I entered this grove and saw what was prepared for him. Henceforth I shall believe in no religion that is not part and parcel of the druidical faith. Oh, for reverential seer to translate into human speech the psalms that are ever pealing forth from these giant harpsichords! How long after King David ceased playing upon his harp of a "thousand strings" did they catch up the divine echoes? And did they sweep their chords in unison when the heavenly choir sang "Glory to God in the highest, peace on earth, and good will toward man?"—[A Lady visitor.

MISCELLANEOUS.

CHILDREN AND WEALTH.—Many are deterred from marriage for fear of the expense of supporting a family. It is a great mistake. A single man spends more in suppers and cigars than would support a wife. Few men lay by much until they have an object to lay by for, and thus it comes to pass that a family is now, as anciently, the best of hostages to fortune and none are so much to be trusted as those who have the largest families. Still as a family increases around man he is very apt to feel as if five or six children were a constant drain upon his efforts at accumulation, and that children were poverty instead of wealth. But it is not so, at least in every respect, or even on the largest and broadest sort of a scale. Thus, for instance, in a national point of view, our first method of estimating the greatness of States is by the number and rapid increase of inhabitants. Every child born in the United States makes the nation so much the more respected abroad and powerful at home, so much more wealthy and intelligent, for on the average each citizen produces more wealth than he consumes, and in some department or other adds to the accumulating stock of human wisdom and experience. Now a nation is but a great family, and as we may best learn what is good for a nation by what is good for a family, so may we best test our views of what is best for a family by what is good for a nation.

Children are weak and need support when the parents are strong to support them, in order that they may be strong when parents are weak and able to protect them, and thus is made up that bundle of strength which a large family ever generates. Each wisely brought up and well educated child is the best of all investments of a parent's wealth of money, of affection and of effort. Happy still is the man that hath his quiver full of them. They are as arrows in the hands of the mighty.

Children keep a young man. He who mingles only with those older than himself soon grows old; but he who accustoms himself to mingle largely and freely with those younger than he as surprisingly retains his youth. It is the remark of Bulwer, certainly one of the closest and best observers of human nature, that it is a good sign for a young man to love the society of men who are older than himself, and for an old man to love the company of those younger. It is thus that youth acquires the experience and wisdom of age, and age retains the vigor, freshness and elasticity of youth. Children have in themselves a fund of wealth in the overflowing affections which God has given them, which they impart to all who come near and have much to do with them. If they call out the energies of a man and make him work hard in the hours of business, they relax and refresh him with their warmth and geniality and absence of care in the hours of relaxation and of throwing off.

There is many a father fearful he shall not be able to give his son so good an education, or so good a start in life as he had or as he could desire, if there is a large family to share his savings. But there is the best of all sorts of education in the attrition of a large family. Franklin bids a young man who would marry well to avoid only daughters, but select his wife out of a large family, because there are a thousand rough edges of temper that get rubbed off by the natural action of a number of young people on each other. Each leans to wealth. For they make a man economical just at that period of life when he is most disposed to branch out in extravagance. From the full possession of conscious powers, making money very easily, he is apt to spend it as fast. If he does this as his strength declines, poverty must overtake him, and disappointment or dependance cloud his latter years; but by pinching when money is coming in fast, when his children are grown, he has no retrenchments to make, but rather a power to expand, and take the world more easily while he is surrounded by protectors who love him, because he has been their protector.—[Philadelphia Ledger.

A TORNADO OF BATTLE.—A witness of the battle of Grand Ecore, Louisiana, describes one of the performances of the Union troops as follows:

Now came the grand *coup de main*. The Nineteenth, on arriving at the top of the hill, suddenly filed off over the hill and passed through the lines of Gen. Smith. We must here mention that the rebels were now in but two lines of battle, the first having been almost annihilated by Gen. Emory, what remained being forced back into the second line. But these two lines came on exultant and sure of victory. The first passed over the knoll, and all heedless of the long line of cannons and crouching forms of as brave men as ever trod mother earth, pressed on. The second line appeared on the crest, and the death signal was sounded. Words cannot describe the awful effect of this discharge. Seven thousand rifles, and several batteries of artillery, each gun loaded to the muzzle with grape and cannister, were fired simultaneously, and the whole centre of the rebel line was crushed down as a field of ripe wheat through which a tornado had passed. It is estimated that 1,000 men were hurried into eternity or frightfully mangled by this one discharge.

SPEAKING WELL OF OTHERS.—If the disposition to speak well of others, were universally prevalent, the world would become a comparative paradise. The opposite disposition is the Pandora's box which, when opened, fills every house, and every neighborhood with pain and sorrow. How many enormities and heart burnings flow from this source! How much happiness is interrupted and destroyed! Envy, jealousy, and the malignant spirit of evil, when they find vent by the lips, go forth on their missions like foul fiends, to blast the reputation and peace of others. Every one has his imperfections; and in the conduct of the best there will be occasional faults which might seem to justify animadversion. It is a good rule, however, when there is occasion for fault finding, to do it privately to the erring one. They may prove salutary. It is a proof of interest in the individual which will generally be taken kindly, if the manner of doing it be not offensive. The common and unchristian rule, on the contrary, is to proclaim the feelings of others to all but themselves. This is unchristian and shows a despicable heart.—[Lady's Book.

WORKING GUNS BY STEAM—INTERESTING EXPERIMENTS ON THE MONITOR WINNEBAGO.—Last Friday, April 20th, by invitation of the inventor, Major Generals Rosecrans and Pleasantson, Brigadier Generals Ewing and Gray, and ten other officers of the army, accompanied by Commodore Hull, of the navy, visited the Union Iron Works at Carondelet, to witness a trial of the steam turret on the ironclad Winnebago, invented by Mr. Jas. B. Eads, proprietor of the works.

As we are prohibited, by general instructions issued by the Navy Department, from giving a discription in detail of this wonderful machine, we can only state that two 11-inch Dahlgren guns are so completely under control of one man in it, and handled with as much ease by him, and with almost as much celerity as a pair of dueling pistols could be. Every movement of the guns is made by steam. They are run out of their ports by it; they are lowered into the hold by steam, for loading, and raised again to be fired, and all these movements are made in as little time as it has taken to relate it.

One of the most interesting features about the turret is the smallness of the port holes inio which the guns are thrust. They are only large enough to receive their muzzles; yet the guns are fired at any angle between five degrees of depression and twenty-one degrees of elevation, with equal facility.

The perfect ease and accuracy with which every movement was gone through with, excited the admiration of the whole party. Four shots were aimed by Gen. Rosecrans at a target, about three-quarters of a mile distant, some ten or twelve feet square, and each one struck it fairly. The firing from it is much more rapid from it than from the Ericsson turrets. The fifteen and twenty-inch guns can be handled in this way quite as easily as those in this turret. When steam is applied to them, as we doubt not it will soon be, the officers of the French navy will no longer be witty with the assertion, that "Americans have put large guns in their turrets, and fire them three times an hour."

If worked by steam, their value will be greatly enhanced by the increased rapidity in firing. These eleven-inch guns can be withdrawn from their ports, lowered and loaded and returned ready for firing in sixty seconds. The horizontal range is obtained by rotating the turret. All the movements and peculiarities of the machine were courteously explained to the party by Mr. J. W. King, Chief Engineer U. S. N. The inventor, Mr. Eads, was not present, being confined by sickness to his house for several months past.

It occurred to us while witnessing these interesting experiments, that this invention would be of great value for land fortifications, and we think the attention of the War Department should be called to it. Patents have been secured by the inventor, not only in the United States, but in the principal countries of Europe.

This, we believe, is the first successful attempt to work large guns by steam, and we feel some pride in the fact that the problem has been solved by a native of the West, and a citizen of St. Louis.—[St. Louis Union.

THE BRITISH MONITORS AND OURS.—Captain Cowper Coles, the constructor of the British cupola vessels, has published a pamphlet in which he points out some differences between his system and Captain Ericsson's. Ericsson's turrets revolve on a single pivot, and stand wholly above the deck, rising to the height of nine feet, with a pilot-house partly over the turret. Captain Cole's are sunk below the deck, and rest upon bearings of their own; so that only four and a half feet of the cupola appears above deck. Ericsson's are turned by steam machinery. Cole's are supported on rollers around the circumference, and can be moved by four different methods, all independent of machinery. He has no pilot house on the turret. Ericsson's are made of from five to eleven one-inch plates bolted together; Cole's are of a single 4 1-2 inch plate. Captain Coles claims that his one solid plate will not, like Captain Ericsson's when struck, discharge a volley of bolts upon those who are working the guns inside the turret; on the other hand, it is doubtful if his plate will stand as much hard battering as Captain Ericsson's. The ports of the American Monitors are closed by sliding doors which are somewhat apt to jam. At least an instance of jamming has occurred. Cole's ports are closed by a mere mantelet or curtain of ropes, which is said to be shell proof, but which would certainly not keep out a solid shot or rifle bolt. And it must be borne in mind that a shot in the turret is almost as fatal as a shell; and that the possibility of either entering is the one dread of the iron clad sailors. Finally, Captain Cole's turret ships are intended to be sea-going. Probably they will make fair weather; but it remains to be seen how the portion of the hull exposed will stand the battering of three hundred pounder cannon. Our monitors—at least of the class now in use—cannot cruise; but they have won two battles in smooth water against the Merimac and Atlanta, and are probably a match for any ships which can be brought against them in the waters they are intended to defend.

PHOTOGRAPHIC EVIDENCE IN AN ELECTION CASE.—A curious election case was decided the other day in the House—that of Sleeper *vs.* Rice, from Boston. The whole case turned on an alleged miscount of sixty votes, in one of the wards which at first gave the majority to Sleeper. The miscount being discovered on the tally-sheet on which the account had been kept, the return was corrected, and the cerificate awarded to Mr. Rice.

When Mr. Sleeper gave notice of contest, Mr. Rice had a photograph made of the original tally-sheet, and this photograph was submitted in evidence to the committee. The testimony of the sun was direct and conclusive. The clerk made his figure 7 very much like his 1. In counting the votes for Rice, he had reached 573. Five more were read, the figure 5 was noted over the last footing 573, and it was carried out 518. Palpably the opening stroke which alone distinguished the 7 from 1 had been mistaken for the final stroke of the 5 on which it joined. The case was perfectly clear, and all that was wanted was to prove that the photograph was taken from the genuine, unchanged tally-sheet. This was easily done, and Mr. Rice was admitted to his seat by a unanimous vote.

The photograph was lithographed by the government printer, and accurate *fac similes* of the tally-sheet were thus distributed among the members. They pleaded the case themselves, and furnished at once a novel and a convenient way of disposing of an election contest.

THE PHILOSOPHY OF THE OX TEAM.

The *Country Gentleman* says:

The economy of the ox team is recognized were heavy, steady work is to be done, where rapidity gives place to vigorous hauling and patience in toiling through sloughs or over rough and rocky ground. The strength of the ox is so great that we are in the habit of under-estimating it, and though we often overtax his endurance, and cruelly try his patience, we rarely, if ever, allow him to exercise his full power. He who has not seen the rival lords of neighboring herds meet and dispute the right to favorite pasture grounds (a sight rarely seen in older parts of the country), has lost one of the most magnificent exhibitions of power, actively and well-wielded strength, steadiness, perseverance and nerve that can be witnessed. There is something terrible in the way they hurl their ponderous bodies against each other, in the clash of their horns, and in the solid thud caused by the meeting of their foreheads. With locked horns and heads held low they crowd each other, the ground yields and the close turf tears beneath their strong hoofs. Every muscle of the body is tense, every sinew taut, and every energy alive. The whole power of the animal is concentrated in one point, and that is his forehead. If we examine the skeleton and muscles of an ox, the manner in which his limbs are placed with reference to his trunk, and how his neck is strengthened by massive muscles, and see how the backbone is calculated to communicate the power of the animal through its entire length, we must all be convinced that Nature intended he should excercise his power through his neck and by his head. When we saddle his neck and neutralize the force of his muscles, and give his head nothing to do, and contract his throat, and force him to draw with the weight of the load, in addition to nearly the whole strain of the draft, bearing upon the tops of the upward projecting processes of the spine, we subject the animal to cruel pain and unphilosophically force him to apply his strength in a most unnatural manner. Now and then we find a sort of bull-necked ox having a broad mass of muscle just where the yoke rests, and such an animal is always famous as a willing drawer. Then, too, if we take our steers young enough we may form a callous for the yoke to bear upon, and thus train oxen of great toughness. The simple fact that a well broken team will back as heavy a load as they will draw shows that there must be some radical fault in their way of drawing. Among other people than those of British descent, we have had occasion repeatedly to notice various forms of head gear. Several are in use in Germany, others still are found in France and Italy. The Mexicans and Texans use head-yokes, as do also the French creoles of Louisiana. Chain-traces, supported by a strap across the back, are attached to the plow in the usual way. Their heads are connected by a rope. The yoke is a strong piece of oak bent a little like a gambrel, padded on the inside of the curve, furnished with straps by which it is attached to the horns, and hooks and eyes on the ends for the traces. Another common method is to strap one end of a straight bar to the front of each ox, and have them draw by the wagon pole or by a single chain. Another way is to put the bar behind the horns and attach it by means of straps and pads bearing upon the foreheads. We have little doubt that the available power of the ox might be increased nearly or quite one-third by the adoption of a more philosophical method of yoking.

IRRIGATION.

G. S. L. CITY, May 20, 1864.

EDITOR DESERET NEWS:

SIR:—Measures are on foot for watering a large tract of land on the south-west side of the Spanish Fork, and also on the north side of the Provo river, by means of irrigation. In view of this it is my desire to seek information on the subject of irrigation, and I know of no better source to enquire for it so that it may benefit others as well as myself, than to apply through the agricultural columns of the NEWS.

How many inches of water is sufficient to secure by irrigation a crop of wheat on gravelly, bench land? How many inches on sandy land? How many upon clayey soil? and how many upon alluvial loam? I would also like to know how many inches of water per week would produce a crop of cane? and how many inches would produce corn and potatoes in the above described localities.

An approximate knowledge, at least, of things is of the utmost importance to companies of farmers constructing expensive canals for irrigation to enable them to estimate the value, extent, expense and probable income of their works.

A knowledge of these things possesses no insignificant importance, as I understand it.

Very respectfully, a novice in matters of
IRRIGATION.

Some of our out-side-city, sound, practical farmers are better capable of answering this than any of our city quills. We therefore submit the queries to them, and shall be pleased to publish replies to "Irrigation."—[ED. NEWS.