

## The Unsold Lands.

BY AUGUSTUS DUGANNE.

A million of acres of unsold land  
Are lying in desolate and arid;  
And millions of men in the image of God  
Are starving—men in the earth!  
Oh! tell me, ye sons of America!  
How much men's lives are worth!

Ten hundred millions of acres good,  
That never knew spade nor plow—  
And a million of souls, in our goodly land,  
Are pining in want I trow;  
And orphans are crying for bread this day,  
And widows in misery bow!

To whom do these acres of land belong?  
And why do they thirst for life?  
And why is the widow's lament unheard—  
And stifled the orphan's cry?  
And why are the poor house and jail so full—  
And the gallows-tree built high?

Those millions of acres belong to Man!  
And his claim is—that he NEEDS!  
And his title is sealed by the hand of God—  
Our God! who the raven feeds;  
And the starving soul of each famished man  
At throne of justice leads!

Ye may not heed it, ye haughty men,  
Whose hearts as rocks are cold—  
But the time will come when the fiat of God  
In thunder shall be told!  
For the voice of the great I AM hath said  
That "the land shall not be sold!"

[From the National Intelligencer.]

## Pacific Railroad Celebration.

We find in the Davenport (Iowa) Gazette the speech of General Dix at the celebration held at Iowa City, on the completion of the Mississippi and Missouri Railroad to that place. The capital of Iowa is now connected by an unbroken line of Railroad with the Atlantic coast, or will be on the completion of the bridge over the Mississippi at Rock Island.

This is the first finished section of railroad west of the Upper Mississippi, and, in its continuance to Council Bluffs, is to connect the Upper Missouri and the districts of country bordering on it and lying still farther west, including the vast territory of Nebraska, with the Central and Atlantic States. General Dix has no doubt, however, that through its whole extent it will be taxed to its utmost capacity to accommodate the travel and traffic of Iowa alone. In a statement respecting the road which he prepared in 1854, he estimated the population of Iowa in 1860 at six hundred thousand souls. Subsequent events, and the opinions of the most intelligent observers, now induce him to believe that in 1860 it will exceed a million. In its local uses, then, and as a mere pathway to the Missouri, the importance of the road is obvious.

But Gen. Dix considers this subject in a more interesting point of view—one in which it cannot fail to commend itself to general attention. He is impressed with the conviction that the first finished railroad to the Pacific ocean will pass through Iowa from Rock Island to Council Bluffs. The bridge across the Mississippi, in his judgment, gives this route a decided advantage over any other.

Rock Island was placed where it is and fashioned by the created hand for the very purpose of facilitating this enterprise. The fine structure erected by the Bridge Company is no impediment to the commerce carried on up and down the river, and will multiply incalculably the facilities of the commerce across the river. There is no probability that it will ever be disturbed. We understand that the litigation on the subject with the War Department is still continued, and that it will ultimately be disposed of by the Supreme Court. To all practical intents, however, it has been already disposed of by the masterly and conclusive opinion of Mr. Justice McLean at the Circuit, which discussed the new question involved in the case with a breadth and grasp of intellect and a vigor of argument which manifest the great consideration that he has given to a matter of such momentous interest to the country.

Taking up his starting point at New York city, Gen. Dix follows his route to the Pacific along the Hudson, the Erie Canal, the great lakes from Buffalo to Chicago, and thence by rail to Rock Island.

With this great line Indiana, Illinois, Ohio, Pennsylvania, New Jersey and Maryland are all directly connected. The population to whose wants it ministered exceeds thirteen millions. For the continuation of this line Iowa presents great advantages. It is a rolling prairie, with no serious obstruction from river to river, from Davenport to Council Bluffs. For the first thirty miles in Nebraska the country is much the same, and to this distance it has been explored by the engineers of the Mississippi and Missouri Company.

The valley of the Platte river, for hundreds of miles, almost to the base of the Rocky Mountains, is shown by all the examination to be highly favorable to the continuation of the road. It is the reported result of the explorations made by the Secretary of War that the difficulties of the line from Council Bluffs to San Francisco are known to be less than on any other route except that of the 32d parallel. From all these considerations Gen. Dix argues that what he calls the Central route to the Pacific must be a continuation of the line, which has now pre-erected itself to Iowa City, which will reach during the next year Fort des Moines, and at no distant day Council Bluffs. The advantages of this route are compendiously stated as follows:

"First, it is completed from New York to Iowa City, fifty-five miles west of the Mississippi, and more than twelve hundred miles from the Atlantic ocean; second, it strikes the Mississippi at a point central to the population and nearly so to the territorial area of the Union; third, it traverses east of the Missouri, a country of extraordinary productive power; fourth,

the formation of the country east of the Rocky mountains is peculiarly adapted, from the extremely low sum of its ascents and descents, to rapid and economical transportation; and fifth, the populousness and wealth of the district already traversed not only furnish the means of sustaining the railroads which have been completed, but of contributing very largely to the continuance of the line further west."

Such is the line which, after years of serious examination of the subject, induced by his official and business relations, General Dix believes to be the route to San Francisco decidedly the most advantageous to the country at large, the only one that can be constructed by private capital, and the only one which will warrant the vast expenditure of one hundred and sixteen millions at which it is estimated. That such a road will be constructed at no very distant day, and mainly by private capital, he has no doubt.

"The growth," he adds, of Nebraska, Kansas, Utah and California will settle the question of construction before the political arithmeticians have done adding up their figures to determine whether the work will pay profits to the shareholders. We ask no aid of the General Government, unless it be a grant of public land, a grant which will take nothing from the Treasury; which, on the contrary, will increase the revenue by bringing new districts of country more speedily into market; which will give the General Government the facilities it requires for the transmission of the mails across the continent, and for the transportation of troops and munitions of war in case of emergency."

Making every allowance for the point of view from which the speaker regarded this great subject, we must admit there is much plausibility in his speculations, and no little force in the facts which he presents in support of them. The rapidity with which Iowa is settling up all the way from Davenport to Fort des Moines will leave no public land unoccupied between Fort des Moines and Council Bluffs by the time the second section of the railroad is completed. Then Nebraska will be ready to take up the work; and the private enterprise and wealth which will have intersected Iowa with a road of iron will not pause at the Missouri, but will hold out a helping hand to the agriculturalists beyond.

Of the road it may well be said, it must gather strength as it goes. The three hundred and fifty miles completed in Iowa will call for three hundred and fifty miles beyond it, just as surely as the completion of the road from Chicago to Rock Island called for the road from Rock Island to Council Bluffs. The work, no doubt, would be much facilitated if the great land proprietor of the country should take an interest in it so far as to part with a portion of his territory to advance the settlement and enhance the value of the residue. But even without that aid, there is every reason to believe that the great problem of a road to San Francisco will be solved by individual energy, while the Government is amusing the people with surveys, speculations, and discussions as to the most practical route.

## Water Divested of Air.

In a lecture recently delivered before the Royal Cornwall Polytechnic Society, by Robert Hunt, F. R. S., attention was directed to some remarkable points in connection with the action of heat on water that contained no air, stating that, arising from this circumstance, as well as from the special condition of the steam generated, we have two very active and predisposing causes of boiler explosions. Water we know in three conditions—as a fluid, as steam and as ice—or as solid, liquid and aeriform. Water is frozen by the loss of heat necessary to maintain its fluid state; ice formed during agitation contains no air bubbles; but under ordinary circumstances, (Wenham Lake ice) the upper portion is filled with air bubbles in straight lines, as if, in endeavoring to make their escape, they became entangled among the crystals. It is a remarkable fact that water in the process of congelation has the power of rejecting everything; consequently, all the air the water contains is expressed. If we get water which contains no air, and prevent the access of air to it, it will not boil at 212 degrees Fahrenheit. In this state we see the temperature increasing to 230 degrees, 240 degrees, or even 250 degrees, and advancing to between 270 degrees and 280 degrees. About these points the whole mass will explode with the violence of gunpowder. This condition of water is not unfrequently found formed in steam boilers, and that, during the process of ebullition, the steam carries off with it the air, the water in the boilers containing very little remnant of its air.

It often happens that a steam boiler explosion occurs after a rest of the engine, and that, when the men return, the feed-water being applied to the water, explosion takes place. Professor Donne has found that if we take water of this peculiar character, bringing it up to 230 degrees, and place a single drop of ordinary water into it, the whole will boil with extreme violence. Supposing that ordinary water contains no air, and the feed-water is turned on, the entire quantity will then burst into explosive ebullition. We shall probably find, therefore, in connection with boiler explosion, that to the absence of air may be attributed many boiler explosions so frequently happening which otherwise cannot possibly be accounted for. It may be further stated that if we take a glass of water and add any poison—say corrosive sublimate or a strong acid or even an ardent spirit—and then freeze the water, agitated during the process, we shall find the ice get tasteless, colorless and inert, and that the poison, the acid, or the spirit, will be gathered into an intense drop in the center of the ice, and all the body will be perfectly pure. To a knowledge of this fact may be attributed the practice of the Russian nobles, who when they desired to have more ardent and intoxicating drink than usual, plunge their bottles of wine or spirits into their frozen rivers, until the contents become

solidified, and then drink the ardent drop which remains within the center of the glass.—[Sci. Amer.]

**SARCASTIC SENTENCE.**—Old Elias Keyes, formerly first Judge of Windsor county, Vt., was a strange composition of folly and good sense, of natural shrewdness and want of cultivation. The following sentence, it is said, was pronounced upon a poor ragged fellow convicted of stealing a pair of boots from Gen. Curtis, a man of considerable wealth, in the town of Windsor:

"Well," said the Judge very gravely, before pronouncing the sentence of the Court, undertaking to read the fellow a lecture, "you're a fine fellow to be arraigned before the court for stealing. They say you are poor—no one doubts it who looks at you; and how dare you, being poor, have the impudence to steal a pair of boots? Nobody but rich people have a right to take such things without paying! Then they say you are worthless—that is evident from the fact that no one has ever asked justice to be done to you; all, by unanimous consent pronounced you guilty before you were tried. Now you might know you would be condemned. And now you must know that it was a great aggravation that you stole them in that large town of Windsor. In that large town to commit such an act is most horrible. And not only go into Windsor to steal, but you must steal from that great man, Gen. Curtis. This caps the climax of your iniquity. Base wretch! why did you not go and steal the only pair of boots which some poor man had or could get? and then you would have been let alone; nobody would have troubled themselves about the act. For your iniquity in stealing in the great town of Windsor, and from the great Gen. Curtis, the court sentences you to three months' imprisonment in the county jail, and may God give you something to eat!"—[Ex.]

**LEGAL PRECOCITY.**—In the early history of the State of Indiana, Sullivan county, a portion of the State famed for its inflexible adherence to Democracy, one elected Sol. Turman, of Turman's Creek, to represent it in the Assembly. It was his first experience in Legislative life, and the mantle of its dignity at first sat uneasily upon his broad shoulders. He got along pretty well, however, by saying nothing, and always voting as Mr. Allison did, whose name was called first, and who was a bright and shining light among the faithful, until one day the "took down the House," as follows:—

He happened to come into the Hall in the midst of some business which rendered it necessary to know the population of the several counties, and the Speaker, not having the documents at hand, was asking the members for information. As soon as he saw Mr. Turman, he addressed him:—"Ah, Mr. Turman, what is the population of your county?" Mr. Turman, taken entirely by surprise, replied:—"Sir, we have scarcely any poplar in the county; the timber is all oak, hickory, birch and maple, with a very small chance of poplar in the bottom."

The Speaker said:—"You misunderstand me. What is the census of your county?" Mr. T., very badly scared, replied:—"Oh they have no senses; they are a d—d ignorant set. I assure you."

It was no relation of Mr. Turman, altho' a man bearing the same name, who, making his maiden speech, while canvassing the county for election to the Legislature, affirmed to his constituents that if elected he would "subserve their interests to the best of his skill and ability."—[Ex.]

**THE ARCTIC REGIONS.**—It is impossible, from anything we are yet in possession of, to form an opinion as to what exists beyond the parallel of 82 deg. 30 min. north, or beyond that of eighty degrees of latitude south.

The north magnetic pole has been discovered and examined. It is elevated but a little above tide, in lat. about 70 deg. N., long. about 98 deg. W. The magnetic pole of the Antarctic has not been reached, for it is walled in by ice, and is situated in lofty mountains not yet explored; its position, however, is further from the equator than the north magnetic pole, and is in the vicinity of two lofty mountains, in which volcanoes are in an active state at an elevation of more than ten thousand feet above the sea. The atmosphere of the Arctic is unlike our atmosphere. Lieut. Parry, when on Melville Island in the winter of 1819-20, lat. about 75 deg. N., long. about 111 deg. W., says:

"We had frequent occasion in our walk on shore to mark the deception which takes place in estimating the distance and magnitude of objects when viewed from an unvaried surface of snow. It was not uncommon for us to direct our steps towards what was taken to be a large mass of stone at the distance of half a mile, but which we were able to take up in our hand after one minute's walk. This was more particularly the case when ascending the brow of a hill, nor did we find that the deception became less on account of the frequency with which we experienced its effects."—[Ex.]

**TIME TO COUNT A BILLION.**—A kind friend, liberal of supposititious wealth, once said to us:

"If I had a billion of money I'd give you a half-a-dozen million, and set you up handsomely in the world!"

Generous creature! but we wonder if he knew what a billion really is, and how long it would take him merely to count the same? As he is still alive and well, let him read the following and marvel greatly thereat:

"A billion is a million times a million. Can you count it? Stop a bit. Perhaps you can count 160 or 170 in a minute; nay suppose you can count even 200 in a minute; then in one hour you could count 12,000, if you were not interrupted. Well, 12,000 an hour would be 288,000 a day; and a year, or 365 days, would produce 105,120,000!"

But this wouldn't allow you a single moment for sleep, nor for any other business whatsoever! Well, now suppose that Adam, at the beginning of his existence, had begun to count, had continued to count, and was counting still, he would

not even now, according to the usual supposed age of our globe, have counted near enough. For to count a billion, he would require 8512 years, 34 days, 5 hours, and 20 minutes, according to the above reckoning. But suppose we were to allow the poor counter twelve hours daily for rest, eating and sleeping, he would need 19,024 years, 63 days, 10 hours, and 40 minutes, to count a billion. Just remember this, when some generous friend hands you over a present of a billion, and asks you to 'look it over,' and see if the amount is correct!—[Harper's Mag.]

**SINGULAR INSTANCES OF EXTRAORDINARY MEMORY.**—Seneca says of himself, that by the mere efforts of his natural memory, he was able to repeat 2000 words upon once hearing them, each in its order; though they had no dependence or connection upon each other. After which he mentions a friend of his, Portius Latro, who retained in his memory all the declamations he had ever spoken, and never found his memory fail him even in a single word. He also mentions Cyneas, ambassador to the Romans from King Pyrrhus, who one day so well learnt the names of the whole senate, and all the populace assembled, each by his name.

Pliny says that Cyrus knew every soldier in his army by name; and L. Scipio, all the people of Rome.

Dr. Wallis tells us that without the assistance of pen and ink, or anything equivalent, he was able in the dark, by mere force of memory, to perform arithmetical operations as multiplication, division, extraction of roots, &c., to forty places. Particularly that in February, 1672, at the request of a foreigner, (at night in bed) he proposed to himself a number of 53 places, and without ever writing down the number, dictated it from memory, at his next visit, twenty days afterwards.—[Ex.]

**STONE DRESSING MACHINE.**—The American Stone Dressing Co., of New York, are now exhibiting for the first time at the Crystal Palace, one of their full-sized Steam Stone Dressing Machines—Eyre's patent. Its operations attract large crowds of spectators, who evince astonishment at the rapidity of its movements and the excellence of its work. In outward appearance the machine resembles an iron planing machine, the stone being moved on a traveling bed. The cutting is done by means of a series of chisels held above the stone at an angle to its surface, just as a workman holds the same tool when at labor. Behind the chisels there is a strong cylinder, having projections upon its periphery, similar to the barrel of a hand organ. As the cylinder revolves, these projections, like so many hammers, play upon the butts of the chisels, and drive them on to the stone with great force.

Ornamental work, such as cornices, fluted columns, &c., may be done with the same facility as plain dressing. The machine shown at the Palace, although not of the largest dimension, strikes, we are told, 28,000 blows upon the chisels per minute, dresses 1000 superficial feet of stone per diem, and saves the labor of fifty or more men. Larger machines have correspondingly increased advantages.—[German Town Telegraph, Nov. 1855.]

**A POPULAR FALLACY.**—"When you are eating leave off hungry." Do no such thing. Supposing your appetite to be honest and hearty—no pampered craving for delicacies, but a natural demand for wholesome food—why, then, no shabby instalments, no ounce in the pound compositions with hunger—pay in full. The claim of the stomach is a just one, and let it be handsomely satisfied. The constitution, physical or moral, must be peculiar that can derive either comfort or benefit from perpetual dunning. Leave off hungry! Pshaw! As well say when you are washing yourself, leave off dirty. There is only one reasonable reason that can be urged in favor of thus bringing a meal to "an untimely end"—namely, that you cannot get enough to eat. In such a case, necessity makes the rule absolute, and you may leave off "hungry as a hunter" who has not caught his hare. But with the whole joint before you—eat your fill. As for the rule, there is only one maxim of the kind that is worth anything—namely, "When you are dying, leave off alive."—[Thomas Hood.]

**DEATH BY STEAM.**—The Connorsville Telegraph says that a little child of Mr. Thos. J. Caldwell, near that place, came to its death in a remarkable manner last week. The mother, it seems, left two children, one four and the other two years old, alone in the house while she went off on some errand, and while she was gone the younger child put its mouth to the spout of the boiling tea-kettle, which was sitting on the stove hearth, and inhaled a mouthful of the hot steam. Its throat swelled very badly, and after suffering great pain for 24 hours, died.

**BASALT.**—Is noticed by the London Builder as a new substance, which has caused the opening of a new branch of industry at Birmingham, for the manufacture of architectural decorations and adjuncts. The ragstone of the neighborhood is melted and cast in hot moulds, and cornices, door-heads, and other architectural enrichments are produced, of very lasting quality. When cast in cold moulds, a glassy lava, known as obsidian, is produced—an interesting fact in a geological point of view.—[Ex.]

**SHORTEST AND LONGEST DAYS.**—At Berlin, London, and Paris the longest day is 16½ hours, and the shortest 7½; at Stockholm and Upsal, 19½ and 4½; Hamburg and Dantzic, 17 and 7; St. Petersburg and Tobolsk, 21½ and 2½; Archangel, 22½ and 1½; at Torner, 23 and 1; at Wardhus, in Norway, and at the North cape, daylight lasts from the 21st May to the 21st July without interruption; and at Spitzbergen the longest period of day lasts 3½ months.—[Munich Gazette.]