

Miscellaneous.

Character of the Great Salt Lake.

The waters of this remarkable inland sea are of the most intense blue we ever beheld, with rippling changes from light to almost blue-black as the waves approach and recede in the sunlight. In gazing at this gorgeous sheet of water from the south, the eye wanders on and on until the waters seem blended in the horizon, giving the blue arch of heaven a deeper hue. The density of this lake is remarkable, requiring little or no exertion to propel through it, and the body will float about upon its surface with ease. About seven miles from the southern shore there is a bold mountain more than half a thousand feet high rising abruptly from the water. The character of the rocks is mostly carboniferous limestone, finely crystalline in some instances, but mostly of a coarse and irregular character; the masses are piled up in weird and castellated forms, adding beauty, picturesqueness and grandeur to the scene.

This water is almost as saline as the most intense brine could render it; at certain seasons of the year myriads of guats are hatched from small maggots that occur in the water, that for the time are disagreeable little pests. There is no shell or other fish of any kind that can exist in its waters; the only animal life existing in it is the little worm or maggot named, which seem to be produced from eggs deposited upon its surface. The shores of this lake do not indicate or present to me the theory that it is only the existing remnant of a vast inland sea, whose shores extended hundreds of miles beyond their present limits. With a ride of eighteen miles from the city bearing its name over a smooth bottom road the lake is reached, and a lovely scene is presented to the tourist, and the surrounding country contains many objects interesting to the naturalist.

FIELD MACHINES AND IMPLEMENTS.

Pliny, the elder, who was born it is supposed about the year of our Lord 23, speaks of the method of reaping grain in the low lands of Gaul. The corn was cut by an ox yoked in a reverse position, (all kinds of cereals were then called corn.) Palladius, writing over three hundred years after, also speaks of an expeditious method of reaping, requiring the assistance of a single ox, during the whole harvest.

Over twelve hundred years passed before a single mention was made of reaping by power. In 1785, a reaper is spoken of in Britain, and in 1790 another is spoken of as being propelled by a horse hitched behind it, which cut and laid the grain in a swath on one side the reaper. In 1806 and 1807 further mention is made, and from 1822 up to 1830 attention became directed to this branch of husbandry. McCormick and Obed Hussey astonished North America by their inventions. The former by the general ground plan of a machine and application of a reel, and the latter by the invention of the open guard.

Every one who remembers an old McCormick or Manny, will remember the enormous motive power required to reap and mow. It was heavy work for four horses, requiring two to counteract the side draft. They were, to use a home expression, "horse killers." From 1850, onward, attention was directed to lessening the draft, and we find Whitley, Wheeler, Ball, Miller, Aultman and others, directing their minds and mechanical ingenuity to this end, with what success the hundreds of thousands of farmers using machines can best attest.—*Rural Press.*

THE GARDEN OF EDEN LOCATED.

The Rev. W. A. Scott, D. D., delivered a lecture last evening at the United Presbyterian Church, Mason street between Ellis and Eddy, on the "Bible Lands and the Garden of Eden." He maintained that the history of the Adam's Eden is a true

narrative, and held that it could now be told where the Garden of Eden is situated. He said there were great objections to the fact that the face of the Garden of Eden was so changed by the flood as to be irrevocably lost. In the first place it was by no means certain that Noah's flood was universal in such a sense. Second, that it is contradicted by almost every geologist; and third, it is inconsistent with the narrative written after the Deluge. The speaker traced the sources now at our command for ascertaining the site and locality of the Garden of Eden, among which he gave the Bible the first place. He reviewed the composition of the Mosiac account of the Holy Land. He says the historical narrative gives us a key to the locality; first, that it was eastward from the writer's location, second, we have the names of four rivers given as flowing through the garden. Two of these still go under the same name, and the other two we are probably able to identify. The Euphrates and Tigris are known to be two of these rivers. They point us very decidedly to the highlands of Armenia as the location of the Garden of Eden. They rise in Armenia within a short distance of each other, and flow into three different seas. The first named in the text Pison or Pishon, has a name and history that identify it with the Phases or Halys of our day. Its source is near the head of the Euphrates, and it flows northwesterly 700 miles into the Black Sea. The second is the Gihon or Araxes of modern times. It rises ten miles from the sources of the Euphrates, and flows 1,000 miles a little north of east into the Caspian Sea. The third is the Hiddekel of Moses and of Daniel, and is almost universally believed to be the Tigris. The fourth is the Euphrates, about which there is no dispute.—*S. F. Bulletin.*

"Uneasy is the Head that Wears a Crown."

Queen Victoria is, personally, perhaps, one of the best and most amiable sovereigns that ever occupied a throne, yet she has been made the victim of no less than five assaults upon her person, which are thus enumerated by an exchange paper: In 1840, a pot-boy named Oxford shot at her in the same spot on which Arthur O'Connor made the last attempt. Prince Albert was in the carriage with her. The Queen rose, but the Prince seized her dress and pulled her down upon the seat of the carriage, which was a low one. Oxford's second shot was aimed too high, and thus the Queen's life was saved. Two years afterward, one John Francis shot at her on Constitution Hill. The Queen, on this occasion, showed great coolness, and ordered the coachman to drive on. Francis was transported for life, although sentenced to death originally. Six weeks afterward, a boy named Bean pointed a pistol at her, which missed fire. He was transported. The next attack (in 1850) was made by an officer of the army named Plate, who struck the Queen in the face and on the head with a heavy cane. The Queen, on this occasion, was also very cool, calming the fears of her children, who were with her and thought her very badly injured. On one occasion, also, a young man secreted himself in the Queen's apartment in St. James' Palace, but did not succeed in his attempt at assassination with a pistol. He was found to be insane. So many attempts on the life of an unoffending monarch, and that monarch a woman, form a curious episode in the history of the world. Here we have the most popular of them all exposed to the pistol of the assassin a greater number of instances, by far, than the most despised and hated.

Calling Things by Their Right Names.

A lady in Boston, occupying a high, respectable social position, in a state of intoxication, staggers and falls in the street. At once a carriage is ordered by a police officer, and she is driven home. "She is seized with a sudden illness." Nearly in the same place, a day or two after, an Ir-

ish woman, under the influence of whisky, reels and falls. She is roughly seized by a police officer and hustled to the nearest police station, brought before the judge, and sentenced as a common drunkard.

James Smith is caught selling lottery tickets, and is condemned for a violation of the law. He is condemned as a felon, and thrown into jail. At the same time, Miss Jones and Madame Prince put up at a fair, the proceeds of which will be used to buy carpets for a church, or aid some reform. These ladies coax men to take shares, and then the prize is awarded to the lucky ticket-holder, amid the cheers of the excited ticket holders and spectators. This is called a raffle. But in the sight of the law and morality, what is the difference between the lottery and the raffle?

Patrick Mahoney helps himself to a hundred dollars, and is sent to the State Prison as a thief. Edward Crafty placed in a position of great trust, with marvelous adroitness takes fifty or a hundred thousand. This is a "financial irregularity." The affair is adjusted; notwithstanding that he is a criminal. It is soon hushed up, and he free, ready, like as not, for another swindle.

Now why not call these things by their right names, and then deal with the rascals accordingly. The shielding of great rascals and covering up gross frauds with false labels, is fatal to mercantile honor and personal integrity.

A MANUSCRIPT'S CHANCES.

It is by no means so easy to get a manuscript printed as some unsophisticated authors fancy, for it has to run the gauntlet of those terrible persons known as "readers." All great publishers, like the Harpers, the Appletons, etc., have several regular readers, besides several others, eminent in their various professions, whom they consult in relation to works of their specialties. Their function is to give full consideration to, and their best advice upon, all matters submitted to them.

For this they receive a salary; and it would be considered on both sides a breach of trust if they accept any compensation whatever from the author for their work. In fact, unless there are special reasons to the contrary, the conscientious "reader" prefers never to see the author in relation to the book while the question is pending.

When he has read the manuscript he writes an opinion, which he returns to the firm, sometimes expressed in a few words, sometimes in an elaborate analysis and criticism. But in any case he never recommends a book except after careful consideration. These opinions are carefully copied into a book, and preserved for reference.

If the first reader's verdict is favorable, the manuscript is then sent to another reader, who knows nothing of what his predecessor has said. Usually, and in all cases of any possible doubt, the work is sent to a third reader. With three opinions by three different persons, the firm consider that they have materials sufficient for a decision in the case.—*Correspondent Springfield Republican.*

NATIONAL AGRICULTURAL ASSOCIATION.—Some time since we noticed an address and circular issued by the National Agricultural Association organized last year at Nashville, Tenn., by an Agricultural Convention which met at that place last October. A circular addressed "to the press throughout the United States and Territories," recently received, says the next session will be held at St. Louis, Mo., on Monday, May 27, 1872.

Each State Agricultural Society or Association is entitled to two delegates; each Agricultural College, to one delegate; each regularly organized Agricultural Society, of fifty or more members, which shall have contributed to the funds of this National organization, in proportion to their representatives, shall be entitled to one representative.

The circular says: We hope that every local organization in the

United States will be represented. Essayists have been appointed, and it is expected that the occasion will be one of great interest to those engaged in agriculture. All who want more definite information can procure a copy of the constitution and proceedings, by addressing the Secretary, S. B. Killebrew, Nashville, Tenn.; F. Julius LeMoine, Washington, Penn., President.

MAURY'S CROP REPORT.—The scheme proposed by Com. Maury for an international system of crop and meteorological report is making its way in the world. Tennessee and North Carolina have endorsed it by resolution passed by their Legislatures, the recent convention which assembled in Washington recommended it, and now it is announced that the Legislature of Mississippi has adopted Commodore Maury's idea upon this subject and has passed an act intended to secure accurate crop reports in the State of Mississippi during the year 1872. The act appropriates \$3,000, and appoints and empowers the editor of the 'Field and Factory,' an agricultural journal published in Jackson, to collect statistics and publish results monthly from seed time until harvest.

HENRY WARD BEECHER, in a recent lecture on Wall street, delivered in Boston, said: "I have buried four generations of men from Wall street in twenty-five years. Wall street is a dunghill of mushrooms. There is a vast growth of men in every single year, and every year they are trampled down in hosts. I know but one or two men in that period who have been able to make permanent gains and hold their gains. And they don't do it by speculation; they added other means of accumulation, which were the foundation of their stability, and I believe that all the men there are trying to be rich in uncanny ways, and trying to be rich without paying for what they get—they are rushing on to destruction. Others may look upon those great, marvelous, and sudden changes that have taken place in New York with ridicule. I feel, in looking upon them, as solemn as judgment day. I have for years been urging the young men in my church not to envy the riches of men that came not by honest means. I have again and again prophesied that the day should come that would see them overwhelmed or ruined."

DOGS vs. SHEEP.—The annual destruction of sheep by dogs is immense. Official reports show in Ohio an annual loss of \$3,000,000 in sheep killed by dogs, and \$1,000,000 in other injuries—a loss equivalent to 6,000,000 pounds of wool.

In two years—from 1868 to 1870—Illinois sank from the sixth to the ninth in rank among the States, in the number and value of her sheep; and this great falling off is attributed to a proportionate increase in the number of dogs, and the lack of proper legislation to prevent their ravages among sheep.

In Maryland the returns from five counties report over 1,100 sheep killed by dogs in one year.

In Missouri the number of dogs exceeds the number of sheep; and if the value of the food consumed by dogs was fed to sheep, they would properly clothe every person in the State and render us independent of foreign wool.—*Rural World.*

THERE being \$1,000,000 left of the Chicago relief fund, for which there is no further call for the purpose for which it was originally contributed, the *Tribune* proposes that it should be used for the founding of a great hospital for the poor of the city, to remain as an enduring memorial of the great calamity and the great charity which it called forth.

THE Chicago "Commercial Bulletin" makes the total number of hogs packed at Chicago this season 1,225,236, which will increase by 50,236 the figures given by the Cincinnati Price Current, and makes the estimated total to the West 4,870,787.

For the Willamette Farmer.

FAMILIAR TALKS.—No. 9.

Your correspondent, A. M. Smith, remarks that by the time we all get done talking and get ready to drain he will be ready to furnish tiles as cheaply as they can be made in Oregon. The difficulty lies in the cost of transportation. He cannot properly aspire to furnish only a limited district. Some of us are ready to underdrain now, and cannot afford to wait, and, without wishing to interfere with the profits of the manufacturer, I am willing to hazard giving information that I hope will enable farmers to look intelligibly into this question of draining.

It is an established principle in draining that the deeper the drains the farther apart they may be. Professor Mape's rule is that "three-foot drains should be placed twenty feet apart, and for each additional foot in depth the distance may be doubled; for instance, four-foot drains should be forty feet apart, and five-foot drains eighty feet apart." This rule of course has limits, and for very retentive soils would not be applicable, although the principle is the same. Your correspondent entirely misapprehends the necessity for deep draining to escape injury from frost; and he advises that it would not be necessary to place them (drains) more than from eighteen inches to two feet below the surface," and thus estimates a light cost for opening the ditches. He would find, in practice, that the number of drains required, with the cost for extra tiles, would more than counterbalance what he saved in the cost of shallow drains.

Waring, who, by the way, is not "an architect living in London," tells us that "there is no reason why tiles should cost more to make than brick. A common brick contains clay enough to make four or five 11-inch tiles, and it will require about the same amount of fuel to burn this clay in the one form as in the other." Parker, in England, estimated the actual cost of 1-inch tiles at one dollar and fifty cents per thousand. I shall, from necessity, test this question this present year, having already made preparations to manufacture enough tiles the coming summer, for home use, and will, in due time, give the readers of the FARMER the result of my experience.

My first costly experiment was in opening the ditches too wide. We now open drains three and a half feet deep, only a foot wide, and find that we can make speedier work by so doing. Again, the common practice has been to make the drain pipe too large, and in this I have learned something in the expensive school of experience. Carefully conducted experiments of those that have made this subject a study, have demonstrated that a 1½-inch pipe, with a fall of three inches in a hundred feet, will carry off the rainfall from two acres; a 2½ tile for eight acres; hence 1½ tiles for the lateral drains are large enough for ordinary localities. For obvious reasons, the drain should be the smallest size that will carry off the water. Such are less liable to become choked.

And now a word as to inaccurate statements. S. takes exception to my statement that tiles costing "about ten dollars per thousand" would cost one cent a foot, and hence for material twenty-two cents per rod; whereas, S. says it would be 24 cents per rod, &c. If a man asks you the time of day, you are not apt to tell him that it is seven minutes and five seconds past five o'clock, although it may have been that precise time when you commenced speaking. In the error claimed, tiles were assumed as a foot in length, while in practice they are fourteen inches. The breakage, however, usually will about counterbalance this gain, but, my word for it, the tiles should be the least part of the cost of draining. Counting labor at \$1.50 per day, four-foot drains will cost, say, 40 cents per rod for the digging alone, leaving the work of grading, laying the tiles, and filling in, yet to be done.