

## FACTS FOR FARMERS.

### Tree Planting.

So small would be the money outlay, so inconsiderable the labor required, to insure for the next generation a wealth of timber land equal to that of which we have the benefit, and shade and shelter trees in even more adequate supply, that it is a great wonder to us, amid all the forcible facts brought forward against the rate at which forest destruction is going on, there has been no more general movement in favor of tree planting. In Germany and Austria, for upward of half a century, the number of trees planted has borne a good proportion to those annually cut down, and it is certain that this is the case now, year by year. In France, Italy and England, also, tree cultivation is now general. But here, with the characteristic improvidence which has come to be considered a marked feature of American character, we are destroying our great virgin forests with a rapidity never before equalled in any other country, and without taking any measures to insure their future growth.

### Treatment of Balky Horses.

Any one observing the inhuman treatment often bestowed upon balky horses, will endorse the following persuasive measure recommended by the *Germantown Telegraph*. To these remedies others may be added, but the ground is sufficiently covered by these hints to meet all ordinary cases of the sulks in horses:

As long as we can remember, this singular fit of obstinacy in the horse has been discussed, and all sorts of plans given for overcoming it. It must be remembered that what will prove a remedy for one horse will not for another. The original cause of it is, doubtless, neglect, and ill treatment of the colt, or after it has been broken to harness. Sometimes stopping a few moments will be sufficient to start the animal again of its own accord. Kind words, patting, a handful of hay or grass, an apple, or a little black pepper put upon the tongue, will induce it to go ahead as if nothing had been the matter. Whipping, at all times, and especially in this case, is the worst resort. We have ourselves induced balky horses to quietly start by some of these means, and one was entirely cured of it by letting it stand until it went on again of its own will. Sometimes the mere turning of the head and letting the animal look in a different direction, or rubbing the nose, has answered; so has tying a string round the foreleg below the knee and drawing it rather tight. Various resorts of this kind should be adopted, but never force.

### Meat for Chickens.

We do not think that we can be mistaken in the belief that we should be far more successful in the raising of young chickens by giving them a great deal more animal food than we are in the practice of doing. Corn meal, mush, boiled potatoes, and similar substances generally compose, as we all know, the principal food of young chickens; but we can see no reason why these young birds should be exceptions to the ordinary rule of young birds in general, which feed very largely, indeed chiefly, on animal food; even those which, when they are mature, live mostly on fruits and seeds, are fed when in their nests on worms, grubs, and insects. We notice the old birds all day long busily engaged in supplying their young with food, but always with animal food. In fact, it is very rare that we have seen anything else. Why, then, should chicks be an exception? The recommendations, almost without exception, in our poultry publications are to give more animal food to our grown fowls if we expect them to give us more eggs, especially in winter, when they help themselves to none. That it is a great inducement to make them lay more generously, we have too many proofs to admit of any doubt. Besides, it is claimed that animal food has other advantages in the way of good health, etc. Why, then, let us ask again, should the young chickens not be benefited with at least a moderate supply of animal food? All chicken raisers know the great losses always suffered in the growth of them, and may it not be owing to a large extent to the withholding entirely of this strengthening food, which is of so much benefit to the mature bird? We, therefore, suggest to our farmers to change their method of feeding their young chickens by giving them a due proportion of animal food, chopped up in very small pieces, and thus find out, each one for himself, whether it is not a very decided benefit in raising to maturity an additional number of the chicks into strong, healthy fowls.—*Germantown Telegraph*.

### Modern and Ancient Rainfall.

In discussing recently the question whether we were in danger of a permanent and increasing reduction of our available water power, a question of most vital importance, we were forced to conclude that no such peril was imminent, and that the scarcity of water so troublesome for two or three years past in New England and the adjacent States was merely local, and would be but temporary. It is however well worth our while to look further. We may find reason to believe that changes are in progress, though moving too slowly to be detected within one or two generations. Our rain records cover but comparatively a very few years, but there are records to which we can refer, going back several thousands, and they tell a different story from that which our brief national history seems to show.

We do not refer in this to geological evidence, though that is by no means to be disregarded, for it is manifest that vast areas of the earth's surface were formerly covered with water which has passed away solely by evaporation. Changes in elevation have raised the continents and thus forced the ocean back into narrower limits, but these changes are of a different kind. Areas of enclosed water owe their continued extent to the relative amount of evaporation and precipitation, and nothing can be more certain than that, in some instances at least, such areas have been in steady progress of contraction since certainly the close of the Tertiary age, this steady contraction being perfectly consistent with fluctuations which might continue many years each.

Two illustrations only are sufficient. The basin of the Aral-Caspian (for the two are to be counted but as one) gives us one. Humboldt says: "The desiccation which is

unquestionably going on in the basin of the Aral Sea . . . is in no way dependent on any violent revolution in the order of nature." Major Herbert Wood of the Royal Engineers says that "there is no doubt of the former vastly greater extension of the combined Aral-Caspian Seas, and extremely little as to their former connection with the Polar Ocean."

The other we find in our own continent. Every one travelling on the Central Pacific Railroad has had the opportunity to see for himself that the Great Salt Lake of Utah has formerly covered a vastly greater extent of surface than it does now. The terraces which its waters have left all along the flanks of the Wahsatch Mountains, at elevations of thirty to fifty feet and more above its present level, are as plainly to be traced, as any railroad embankment, a state of water which would flood a vast area.

But these manifestations we take only incidentally, for we know nothing of the amount of time involved in them. If we can find, however, that the same changes have been in progress within the time which we can measure by definite years, then these geological records become to us of immense importance, since they show a persistence of effects and causes that must certainly depend on natural laws, and may be expected therefore to continue in steady action now and for all time to come.

No matter what views we take of the origin of the human race, it is manifest to all that the oldest of all indications to which we can refer, written, monumental, or traditional, are mostly grouped around the eastern limits of the Mediterranean Sea, with the countries to the northeast beyond. We look in the dim light of extreme antiquity to the regions around the Euphrates and the Tigris. The Assyrian Empire is to us the embodiment of the very earliest days. Its power swayed all the Southwest of Asia, and it was because it had a thickly peopled domain. Dr. D. Fraas says: "The most fruitful land of antiquity was, as is well known, the region bordering on the Lower Euphrates and Tigris, and in particular that called in later times Mesopotamia. But as Richter says, the land of great canals is now desert and barren, without settlement, and a dried up wilderness—covered with a growth of the plants peculiar to a saline soil and all this where once was the 'garden of the world.'" Mr. Blandford, chief of the India Geological Survey, writes of Persia: "From the accounts given by ancient writers, it appears highly probable that the population was much greater and the cultivated land far more extensive 2,000 years ago than at present, and this may have been due to the country being more fertile, in consequence of the rain fall being greater."

Captain Burton says: "The once wealthy and commercial land of Midian has become a desolation among the nations; the area of some three thousand square miles, which thirty centuries ago could send into the field 135,000 swordsmen, is abandoned to a few hundreds—half peasants, half nomads." Once more, when the Israelites, in their exodus, came up on the east side of the Dead Sea, the whole plain of Bashan was swarmed with inhabitants. It was dotted over with walled towns, with intervals of but a very few miles in any case. The towns are there now, but where are the people? A few wandering Bedouins roam here and there, but the cities are "waste, without inhabitants." The land is in no way able to support the population which three thousand and three hundred years ago lived in prosperity. We may not deny that various causes have contributed to this decadence—moral, social, political, but the one which has been engaging our attention is of itself impracticable. "Ichabod" has been written on the land, for its glory has departed with the rain.

And so we might go on; the same truth is shown everywhere over Asia and Europe and the north of Africa. But we will look at only one other single line of evidence, and that shall be among the ancient people of America. We will come nearer in space and probably nearer in time, though how much nearer we do not know. It is well known to all that in many parts of New Mexico and Arizona are found extended proofs of the former occupancy of that country by a people certainly distinct from the Indians of modern type. They have long since passed away; how long since we can only conjecture. But their houses remain—some of them single, some in villages and towns. Some are in the valleys, some on the mesas far above the valleys, while many are real cliff dwellings, recalling in their situations the homes of Edom.

The one point which at present interests us as to these ruins is this: no one now can live where they were built, simply from the lack of water. Dr. Bessels, speaking of those along the Hoven Weep, says: "There is no running water whatever during the greater part of the year." Mr. W. H. Jackson, describing those on the San Juan, states that "there is not a living stream throughout this whole region." Capt. Simpson, in his report to the Secretary of War, detailing those he saw along the Rio Chaco, says: "The country, as usual, on account doubtless, of constant drought, presented one wide expanse of barren waste." And yet over all that stretch of country was manifestly found long ago an abundant population.

It is evident, therefore, that then rain fell in much larger amount than now; and, inasmuch as there is nothing to indicate any sudden change, it is reasonable to infer that the change has been gradual, and hence that it may be still in progress.

One item of interest is worth mentioning as being a collateral proof of such a condition. Through all the region northward thence—New Mexico, Arizona, Nevada, and Utah—the tree growth (which is very limited) gives one constantly the impression that it is about to come to an end. The nut pines, for instance, all look old; there is scarcely such a thing as a young tree to be seen. The bare, ragged branches seem as though they might have battled the storms for hundreds of years, but could scarcely do it much longer, and then when they were gone there would be nothing left.

All these facts apparently make one indication, and though any local droughts, even if protracted over several years, may be of small moment, yet the evidence comes strongly to us that a gradual desiccation of the earth's surface is in progress, and that this proceeds from causes not connected in any way with human agency, and of course not under human control.

### Arabi Pasha's Influence.

A correspondent of the *London Standard* writes that journal from Suakim: I have referred to the fact that the fellahs are not willing soldiers. I fear it must be accepted that their hearts are still with Arabi and the anti-foreigner movement of which he was the champion. Immediately after Arabi's trial there can be no doubt that in Egypt the British had earned some popularity. We had saved the nationalist leaders and hundreds of their followers from death and banishment. While the treatment promised to Arabi in Ceylon seemed generous in the extreme compared to that which the Khedive, if left to himself, would speedily have accorded, this popularity and sympathy of the nationalists seemed a hopeful sign for the success of the task we had undertaken in Egypt. But somehow we seem to have lost all that good will which the French said we had won through intrigue and gold more than by straight policy. We have estranged the Nationalists in some mysterious manner, and, on the other hand, have not made ourselves very popular with those who surround the Khedive. The other day I saw and conversed with Arabi in Ceylon. I found him much changed. Instead of the cheerful contentment which he manifested when he first landed in the island, he had grown morose and sulky. No attention is paid to him by the government officials of the colony. He is allowed to do as he likes and see whom he likes, and he sees few Englishmen compared with the number of foreigners who call upon him. From every Messageries steamer that puts in at Colombo, dozens of Frenchmen go to pay the exile a visit, even the saloon stewards being admitted, and with all these, of course, the theme of conversation is condolence with Arabi and his lot, and abuse of England and her selfish policy. And Arabi himself does not in any means talk in so friendly a manner now of England and her work in Egypt as he used to do after the trial. All this, perhaps, would matter little, were it not that Arabi is unrestricted in his correspondence, and he is consequently, I happen to know, in communication with his former friends in Egypt. He is well posted up in everything that is going on in that country; and it is a pity that his influence should be carelessly allowed to mitigate against us, when with a little good management it might easily have been turned the other way. One has only to talk to the Egyptian officers and soldiers here about Arabi to see that that influence even now counts for something. When I tell them that I saw their late leader only a short time ago, their faces brighten up as they eagerly ask for information concerning him.

### THE RED SUNSETS.

#### No Correct Explanation of the Phenomena yet Given.

No recent phenomena has more puzzled astronomers than the remarkable appearance of the atmosphere as observed after sunset and before sunrise during the last five months. These brilliant glows have been seen in all parts of the habitable world. They were first noticed on the 28th of August, and they may still be seen, both morning and evening, when the atmosphere is favorable. It is well known, in fact, that on any clear day the matter by which the appearance is produced may be seen around the sun, extending to a distance of twenty or thirty degrees. The phenomena have been ascribed:

1. To watery vapor in the atmosphere.
2. To meteoric matter through which the earth has been supposed to be passing; and
3. To the volcanic eruptions of Java and Alaska.

The first conjecture has been discovered by the spectroscopist. The second may be said to be rendered extremely improbable by the long continuance of the glows. The earth crosses the meteoric streams of August and November in a few days at most, but the present phenomena have already lasted more than five months. The volcanic hypothesis is received with most favor, and we must either accept it or admit that the true explanation remains yet to be discovered. In the last number of *Sidereal Messenger*, I have briefly stated some objections to this theory, as follows:—"No similar results—at least to any great extent—had been known to follow volcanic eruptions. If the matter started from Java on the 26th of August, its rate of motion through the atmosphere till its appearance in Brazil was 100 miles an hour. Or, if we assume that the appearance in South America was derived from the Alaska outburst, we have the additional improbability that results of a character before unknown following volcanic eruptions in opposite hemispheres at nearly the same time. Again, what force could have maintained this volcanic matter at so great an elevation during a period of several months?"

In short, no explanation yet offered is free from serious difficulties.

### Preaching and Practice.

"See here, Mr. Blank, what are you going out to-night for?" asked Mrs. B. with a threatening look.

"Big political meeting to-night," explained Mr. B., apologetically.

"Political meeting, eh?" echoed Mrs. B. "You have been going to political meetings every night for five weeks, and if it had not been for me you would have worn your boots to bed every time."

"But just think how nice it would be if I should get nominated for something? Think of the loads of money I could rake in, and the nice furniture and new clothes and seal-skin sacques and—"

"That will do," interrupted Mrs. Blank; "I have heard that story before. You made a speech last night at a ward meeting, I see."

"Yes," responded Mr. B., with pardonable pride.

"And I see by the two or three lines notice of it in the newspaper that the burden of your remarks was 'the office should seek the man and not the man the office.' Now, you just take off that overcoat; and sit down, and if any office comes along and knocks I will let it in."

A Burlington mother has miraculously cured her young hopeful of smoking by the laying on of hands.

### LAUGHLETS.

A veteran was relating his exploits to a crowd of boys, and mentioned having been in five engagements. "That's nothing," broke in a little fellow, "My sister Sarah's been engaged eleven times."

Little Willie has been summarily corrected by his mother for repeated acts of naughtiness. The punishment being over, "Papa," he sobs, in tones of anguish, "how could you marry such an ill-tempered woman as mamma?"

"You see," said a lawyer, in summing up a case where one party had sued the other on a transaction on coal, "the coal should have gone to the buyer." "Not so," said the judge, "it should have gone to the cellar."

"There are various keys," said a young man to another, "such as sul-key, bal-key, and ris-key, but the only key to your heart is Su-key." "It may be so," replied the other, "but I defy anything to reach your heart but whis-key."

A rich old bachelor was dying. Several female cousins as old as himself came to nurse him, in hope of being remembered in his will. The first question usually asked in the morning by one of these cousins was, "Are ye any waur?" A more kindly inquiry would have been, "Are ye any better?"

"What do you think of my article on the political situation?" inquired Fenderson. "Everbody I have heard speak of it," replied Fogg, "praises it very highly." "Do they?" said Fenderson eagerly. "Whom have you heard speak of it?" "Nobody but yourself," said Fogg carelessly.

Sir Robert Peel told a story of a man who gave warning to his master that he must leave his place. "Well, John," said the master, "I am sorry you are going to leave me; what are your causes of discontent?" "Well," said John, "I don't wish to be unreasonable, but I want three things, sir; more wages, less work, and I should like to have the keys of the wine cellar."

An impatient Welshman called to his wife:—"Come! Come! Isn't breakfast ready? I've had nothing since yesterday, and to-morrow will be the third day!" This is equal to the call of the stirring housewife, who aroused her maid at four o'clock with—"Come, Mary get up! Here 'tis Monday morning; to-morrow is Tuesday; and next day's Wednesday—half the week gone, and nothing done yet!"

A gentleman who had been allured by the announcement of a quiet country hotel, came down the morning after his arrival and made complaint that his boots had been outside his door all night and until eight o'clock that morning, and nobody had touched them. The landlord, who, in his shirt-sleeves, was tipped back in a chair and picking his teeth with a knife, beamingly remarked—"Law me, ye might have left yer purse out there all night, and nobody would have touched it. Honest critters down here. I tell ye."

They tell a capital story in the Temple of ex-Chief Baron Pollock, that one who wished him to resign waited on him, and hinted it, suggesting it for his own sake, entirely with a view to the prolongation of his own valued life, &c. The old man arose, and said, with his grim, dry gravity, "Will you dance with me?" The guest stood aghast as the Lord Chief Baron, who prided himself particularly upon his legs, began to caper about with a certain youthful vivacity. Seeing his visitor standing surprised, he capered up to him, and said, "Well, if you won't dance with me, will you box with me?" and with that he squared up to him, and half in jest half in earnest, fairly boxed him out of the room. The old Chief Baron had no more visitors anxiously inquiring after his health and suggesting his retirement.

### Be Somebody.

Robert J. Burdette, the facetious editor of the *Burlington Hawkeye*, has been lecturing to large audiences in different parts of the country, and in his amusing style he imparts to the rising generation some wholesome advice. The following is from one of his lectures:—

"Be somebody on your own account, my son, and don't try to get along on the reputation of your ancestors. Nobody knows and nobody cares who Adam's grandfather was, and there is not a man living who can tell the name of Brigham Young's mother-in-law." The lecturer urged upon his hearers the necessity of keeping up with the every day procession, and not pulling back in the harness. Hard work was never known to kill men; it was the fun that men had in the intervals that killed them. The fact was, most people had yet to learn what fun really was. A man might go to Europe and spend a million dollars, and then recall the fact that he had had a great deal more fun at a picnic twenty years ago that cost him just 65 cents. The theory that the world owed every man a living was false. The world owed a man nothing. There was a living in the world for every man, however, provided that the man was willing to work for it. If he did not work for it, somebody else would earn it, and the lazy man would "get left." There were greater opportunities for workers out West than in Eastern cities, but men who went out West to grow up with that country must do their own growing. There is no browsing allowed in the vigorous West. An energetic man may go out into the far West, and in two or three years possess himself of a bigger house, a bigger yard, a bigger barn, and a bigger mortgage than he could obtain by ten years' work in the East. All young men ought to marry, and no young man ought to envy old men or rich men. In conclusion, Mr. Burdette said that a man should do well whatever he was given to do, and not despise drudgery.

### Looking out for Lorne.

It is understood to be the wish of the Queen that the Marquis of Lorne should be called to the House of Lords by one of his father's minor titles, and that this will be done shortly after the opening of Parliament. It is said that Her Majesty's object in this is to prepare the way for the appointment of Lord Lorne either as Viceroy of India or as Lord Lieutenant of Ireland. In the one case the annual income is \$500,000, and in the other, \$100,000.

### SNOWED UP.

#### Four Days on a Rocky Mountain Train.

Charles Willis, a passenger on a train which was snowed under near Osier, was in Denver recently. In conversation with a reporter he detailed his experience. "We left Silverton last Sunday," he said. "A heavy snow storm was falling, but it wasn't very cold. When we got to Durango it commenced snowing hard. It seemed to fall in flakes as big as your hand. We had to plow through the stuff for several miles, and made headway like a ship against the wind. About three miles from Osier we stopped, and there we remained for over three days. We made the best of it we could. The women were half scared to death, and one of them wanted to get out and walk. Her husband told her she could go if she wanted to, but after taking a survey she concluded to remain where she was. Lunch baskets were soon emptied, and a raid was made on the express car. There was little in it, but what there was was confiscated by Tuesday night. Some parties came to us from Osier on snow shoes, and were kept busy after that packing provisions until the road was cleared. We had to melt snow for water, and didn't go unwashed if we did go without a change of clothing. If our quarters had not been so narrow and confined, we would have had an excellent time, and tried to have one anyhow, if we did but partially succeed.

"At last, on Tuesday afternoon, we got an opening, but had a hard time of it until we passed Toltec gorge. I suppose there are several millions of tons of snow in that pass alone. When we reached Saltille it was comparatively easy traveling, and thence on we had no difficulty. I was glad when we reached Pueblo. It was like getting into Paradise after having been in the frozen circle so graphically described by Dante. But I think if Dante had ever been snow-bound for four days he could have improved upon his description."

### An Electrical Exposition in Philadelphia.

Some time during the coming fall, Philadelphia will hold what it is hoped will be the most important exhibition of electrical machines and methods so far convened anywhere. Some very novel and startling events will mark this display of electrical power. It is proposed to place an electric light of 100,000 candle power in the bed of the Schuylkill River. This is to show how torpedoes and other warlike instruments can be detected before they do damage by exploding. The developments of electrical science as applied to daily necessities are simply marvelous. A vast industry has thus been created in the last few years involving tens of millions of dollars. It has so far been found impossible to procure trained experts to supply the demand for electrical machinery. In the classification adopted the different groups will consist of: First, apparatus for the production of electricity; second, electric conductors; third, measurements; fourth, applications of electricity, under which there are two subdivisions, apparatus of small power and those of large power; fifth, terrestrial physics sixth, historical apparatus, and seventh, educational and biographical. The section devoted to measurements is probably one of the most interesting to scientists and the least known to the public of any of the exhibits.

### A Wonderful Bell.

The temple at Koto, Japan, says a correspondent of the *Philadelphia Press*, are mainly of interest on account of their bell, which swings in a monster wooden belfry half way up the hillside, back of the buildings proper. This bell is a huge bronze cup with nearly perpendicular sides and a flat crown, and, like all other Japanese bells, is sounded by means of a huge beam kept in place by ropes, but, when occasion requires, brought against the rim of the bell with great force. It requires twelve coolies to manipulate this beam. Formerly it was only rung once a year, but now it may be heard two or three times every month. It is one of the greatest wonders in Japan. It is 18 feet high, 9 and a half inches thick, 9 feet in diameter, and weighs nearly 74 tons. It was cast in a monster mould in the year 1633. As the bell was cast with the rim up, the gold entering into its composition—computed to be 1,500 pounds—sunk to the crown. It has a magnificent tone, and when struck by the open palm the vibrations may be heard at a distance of one hundred yards.

### Leap Year Festivities.

The season of leap year parties is upon us and the feelings with which these anomalous festivities are regarded by their votaries probably vary as widely as do their views of theology. There are those to whom there is always a certain savour of vulgarity about a leap year party, but those who are less fastidious the strongest sensation is that of strangeness and an emotion of topsy-turveness. The unfortunate damsels who are entrapped into acting as escort to one of these gatherings generally emerge from the trying ordeal with a new sense of the weighty nature of the masculine duties, and, as a rule, find one experience quite sufficient for four years. It is amusing, moreover, to note how few people have the imagination or observation necessary to change places socially with one of the opposite sex, and satisfactorily to act the part. What seems at first thought the easiest of undertakings, in reality requires no inconsiderable share of histrionic powers. It is usually safe for either lady or gentleman to set out for a leap year dance with the preliminary wager that before the evening is over both will have made half a dozen palpable and undeniable blunders in their respective roles, and such book-making will be found successful beyond all precedents in betting.

"Mike," said a priest to his servant, "if the Protestant minister calls to-day, remember I do not wish to see him; don't say I'm not at home, for that would be a lie, but give him an evasive answer." "Och, I will," said Mike. "Well, Mike," said the priest in the evening, "did the minister call?" "Faix, he did, your reverence." "What answer did you give him?" "I gave him an evasive answer, as your reverence told me." "But what did you say to him?" "Why, your reverence, he asked me was yer at home, and I told him, was his grand-mother a donkey."