

A True Statesman.

The decease of Hon. Charles Sumner, at the age of 63, has been marked by the sincere sorrow of the nation. We have too few, among living politicians, whose conduct is governed by purely honorable motives, not to regret deeply the loss of one whose character has been beyond assault. Whatever mistakes Charles Sumner committed, and in whatever personal collisions he may have been involved, no one dared to impugn his integrity. During his career as a statesman, Mr. Sumner had constantly to face embittered attacks from political opponents on all sides, whom his unflinching determination had stung into enmity. No map of any strength could have lived amid the stirring events which have occurred during our national history without making enemies, and bitter ones. Even Washington, who was one of the very few men who met with appreciation during their lives, was attacked in the same manner.

Sumner first came to the front during the excited sectional debates which preceded the attempt to dismember the Union, and his firm, unwavering course, through all those anxious days, did much to inspire confidence among loyal men, while it naturally made him a mark for the personal abuse of the secession party, culminating in the disgraceful attack upon his person.

Mr. Sumner evinced a remarkable aptitude for his work as a statesman. He was well versed in the intricacies of international law, and had a long experience in the councils of the nations. His merits were so conspicuous that he was often called upon to assume the more responsible duties of the Senate, and served upon the most important of the Senate committees.

But it would be purely gratuitous to dilate upon the worth of a man so well and widely known. Suffice it to say that our country has suffered an irreparable loss, a loss which will be felt by all who have heard the name of Charles Sumner.

Failure of Seed.

On another page of this im pression there is some correspondence on the much vexed question as to the responsibility of seedmen, which suggests naturally a few thoughts on this subject.

At this time of year and later in the season, failures of plantings are annually reported from all quarters. Seed which has been sown in hope, lies fruitless in the ground, and becomes only a source of disappointment. There are, as in all things, variations in the results, and there is always a wide field for speculation as to probable causes. Seeds may remain wholly inert, and die without presenting a vestige of growth above ground; they may sprout irregularly in spots, leaving wide inter-spaces of barrenness; or they may flourish vigorously and not be true to name. There are two parties upon whom the blame may rest, without considering the laps and mishaps of fickle weather. He who sows may bear fault, though apparently every precaution has been taken. Often one is puzzled to imagine how so much care and foresight have counted as naught, though more frequently the error is easily detected. When we consider the multifarious processes which have to be performed in preparing the soil, planting, cultivating the growing crop, and finally harvesting it, the probability of a mistake somewhere seem alarmingly in the ascendant. Nature, so provident of her own, acts mysteriously and completely. When man attempts to assist the operation of natural laws, confessedly in great part ignorant of their character, it is no wonder that he sometimes makes a blundering job.

An agricultural writer says: "A main cause of failure is sowing too deep, and actually burying the seed. In a state of nature all seeds germinate on the top of the ground, protected with a slight covering of fallen leaves or blades of grass. There is a golden rule to guide us in sowing seed, and that is, never to cover it with a greater thickness of soil than the diameter of the seed itself. There are, of course, exceptions; but in sowing radishes, for instance, the ground should be forked or dug level. The seed should be sown, and if a shower of rain falls, nothing more is required, as it will break down the rough ground sufficiently to cover the seed. Many amateurs suppose that rakes are for the purpose of clearing the ground of stones, the very pores of the soil by which light, heat and moisture reach the roots of all plants. The consequence is, you have a surface washed flat by the rain and baked hard by the sun, and as the soil so cultivated is sown, and consequently cannot be disturbed, it becomes an eyesore for months.

There is one fact which is not always considered: that while nature prudently distributes the chances of growth, by continuous planting under varying conditions of soil and exposure to air, moisture and warmth, her imitators are obliged, from obvious reasons, to stake all on a single attempt, uniform in time and mode. During the history of agriculture, however long that may be, man has learned to cultivate the earth with a reasonable certainty of success; and yet, every now and then, some inexplicable failures baffle them.

The most important thing is, of course, the starting point. Without good seed there can be no success, and too much care can not be bestowed upon its production and selection. And this brings us to the question discussed by our correspondents: How far is the one who furnishes the seed responsible for its quality?

Most kinds of seed are grown solely for the purpose of planting. Every care is taken to insure perfect, mature kernels of the best varieties, and high prices are put upon this produce. Yet, with all the care which seed-growers take, who have their reputation to sustain, and who undoubtedly exert themselves to furnish a good article, it frequently occurs that the seeds which they sell are poor or worthless. Next to the seed-grower comes the seed-dealer. Seedmen, too, have a name to keep up, else the deception and carelessness of one year may bear evil fruit the next. If we could conceive of a man, who, for the sake of a profitable course of fraud during one year, would disregard the succeeding ones, it would be easy to understand why such a plan might be adopted. But it is evidently absurd. There are undoubted cases, too frequent indeed, in which seeds bad or not true to name are palmed off on the unsuspecting purchaser, who has, perhaps, no means of knowing the worth of his bargain until the planting season is past, and too late, the truth is seen. The seedman who has sold not only the seed, but also the purchaser, would certainly be remembered against another spring-time, and the evidence of a few victims to a certain attempt to deceive, on his part, would ruin his business. Hence we think that, if only from policy, nearly all seedmen are honest.

The seed-dealer is responsible thus far: He is bound to procure his goods of reliable persons, whose name upon a packet has been proved to be a solid guaranty of the merit of its contents; he is not to shirk paying fully for what he in turn charges, and is acknowledged to be worth, fair and even high prices; he is to test seed of which he has doubts, and refrain

from selling such until his suspicions are removed by personal trial; he is to place such information as he possesses regarding the seed wholly at the disposal of his patrons; and, it is hardly necessary to add, is to be thoroughly honest in naming and pricing.

We are not living in the millennium, and there are dishonest seedmen as well as dishonest persons in all other branches of business. The laws, as they now stand, should be made a sufficient barrier of restraint. Where fraud, or the intent to commit fraud, can be proven, a recourse to litigation should bring but one result—conviction of the guilty. A special law, requiring pecuniary amends for losses incurred through the dealer's carelessness might be enacted, but would be an endless source of suits and counter-suits, and would be met in the end by another act, removing the responsibility one step, upon the seed-grower. The latter could probably find some one back of him to prosecute, so that in this view all would be happy.

Recent Patents.

Among the patents recently obtained through Dewey & Co.'s Scientific Press American and Foreign Patent Agency, the following are worthy of mention:

EYE GLASS.—Louis A. Berteling, San Francisco, California. This invention provides an improved saddle or clamp for fastening the eye glasses upon the bridge of the nose. It consists in attaching the shoes or clamps to a spring in such a manner that they will possess an elasticity both at the top and bottom. The clamps will then adjust themselves to the seat or shape of the nose without pinching, and at the same time have a stronger and firmer hold.

CAR PROPELLER.—Fayette Mace, Jackson, Amador county, California. An arrangement by which a running stream is made to propel a car in either direction along its bank. Mr. Mace proposes to construct a railroad track alongside a mining stream or ditch which has a current, and place upon it a car. This car will be provided with a shaft which extends out over the stream. A wheel, similar to a paddle

A Farm Hand's Complaint.

EDITORS PRESS:—I feel like giving the public a few ideas about the way farm hands are treated by some of the farmers. There has been a good deal written on this subject lately, especially since the organization of the Granges; I will speak from my own experience.

I have been a farm hand for seven years, and have worked for a great many different farmers during that time. Now I am going to lay prejudice aside and speak the truth. The worst class of farmers to work for are those who farm on a large scale; those who are able to provide better for their hands if they would. If we work for a poor farmer we get a bed in the house, and sit at the same table with the family, and sit at his fire and read his papers, and enjoy the comforts of his house generally. But with the large farmers we have to furnish our own bed, if we have any; if not, may be he will be kind enough to give us an old piece of blanket or quilt, or a few old sacks to cover ourselves with. He will tell us to go out in the barn or in the granary, or to the hay stack to sleep. Then when we get up in the morning and take care of our teams, we stand around the barn until the cook (a Chinaman usually) says breakfast is ready. Then we walk around the house to the kitchen; there we find a place to wash ourselves out of an old barrel or a milk pan; then we wipe on the towel or piece of barley sack, that hangs there for us only; then comb our hair—that is, if we happen to have a comb of our own. As a general thing we have plenty to eat, such as it is; but it is cooked in such a style that we can scarcely eat it. The farmer expects us to go to the field and do as much work as though we had plenty of the best to eat and a good place to sleep. If we want to go any place we have to walk; he would not let us have a horse to ride to save our lives; he will tell us to be on hand to go to work in the morning. If we are walking along the road and one of them overtakes us we scarcely ever ask for a ride, because we know that he does not like to have us ride with him.

If the farmer gets good steady hands, as he calls them, he will keep them just as long as he has plenty of work for them, and just the minute the work is done they must go, rain or shine. He doesn't say "Boys, stop until the storm is over." No, he would not let them stop if they offered to pay for their board, he



CHARLES SUMNER.

wheel is attached to the end of this shaft so as to dip in the water. A gear wheel on this shaft engages with a gear on one of the bearing wheels of the car so that when the current revolves the wheel and shaft the bearing wheel of the car is turned so as to carry the car up the stream, when the car has arrived at the head of the stream and received its load the gear wheel on the shaft is disengaged from the bearing wheel, and the shaft is fixed by a clutch so that it cannot revolve. As one of two of the buckets or wings of the wheel will then be in the water the current will carry the car down the stream. This arrangement is especially adapted for propelling a wood or lumber car from the foothills down to some shipping point.

PLANK ROADWAYS.—Cornelius McGowan, San Francisco, California. This invention consists in constructing plank roadways of boards which are thicker at one end than at the other and in placing the thickest portion in the middle of the roadway where the most wear occurs, while the thin portion is placed next to the sidewalk where there is the least travel.

SHIRT FRONT.—Isaac Zacharias, San Francisco, California, provides a shirt front the upper half of which is made of linen while the lower portion is made of colored material. At the point of junction in the middle of the shirt bosom is a flap the upper surface of which is linen (usually an extension of the upper half of the shirt bosom) while the under part is formed of the same material as the lower portion. By turning the flap up and buttoning it upon each side of the neck the linen portion is covered and the colored side exposed, but by turning the flap down the linen front is exposed.

VACUUM RELIEF VALVE FOR STEAM CYLINDERS.—Andrew J. Stevens, Sacramento, California. This invention provides a relief valve in the steam dome of the boiler, which is connected with the steam cylinder so that when the throttle is closed and the locomotive is running on a down grade without steam, the vacuum usually formed by the pumping action of the piston will be relieved and the piston lubricated.

IRRIGATION PIPE.—Nehemiah Clark, S. F., Cal. This invention relates to an improved arrangement for coupling underground irrigation pipe by which the water is allowed to escape at the joints, without danger of clogging the escape opening.

CUTTING APPARATUS FOR HARVESTERS.—Philoander Kitts, Monticello, Cal. This invention consists in an improved cutter bar for headers by which the heads of grain are prevented from dropping in front of the sickles after it is cut. The improved arrangement also strengthens the cutter bar while it is rendered much lighter than formerly.

SEED SOWER.—John B. Nixon, Cottonwood, Cal. Relates to an improvement in broad-cast seed sowers, and consists in providing a simple arrangement, whereby the direction of the rotation of the distributor can be reversed so as to scatter the grain in an opposite direction alternately thus sowing it more uniformly.

To get rid of stumps, some one suggests boring a hole in the center of each stump, filling with saltpeter, allowing the latter to be absorbed, and then igniting by means of kerosine. It is said that the stump will smoulder away to the roots. It would be easy enough to try the experiment, but we doubt its success.

EDITORS PRESS:—Your correspondent's description of wild coffee was such that the coffee was easily recognized. I send you a sample which I found under a bush. Although at this season of year the berries are either growing, or have been destroyed, I found by careful scratching among the pile of rocks, under a bush, a few seeds, but not enough to test their value as coffee. If this proves to be real coffee in a wild condition—it has all the appearance of the genuine—the chapparal belt can produce enough to supply the State.

The bush has only been considered a nuisance, as it grows near springs of water on land suitable for gardening purposes. I have remarked that when the berry is black ripe it is greedily devoured by cattle, sheep and goats. For want of a better name, it has been dubbed bastard willow. The coffee and the willow grow together in perfect harmony, and require about the same conditions.

If it really is valuable, there will be no difficulty in propagating—the trouble has been to get rid of it, for so long as a rootlet remains there will be a bush. You will notice that one of the seeds sent has sprouted. Sand and rocks seem to be best for starting them. Only prove that the sample forwarded is good coffee, and these good-for-nothing chapparal hills will give you all the coffee necessary to break up the "rings." JOHN TAYLOR.

Mount Pleasant, March 15, 1874.

Another Specimen.

EDITORS PRESS:—Five years ago, while out on a hunting trip in Calaveras valley, I chanced to see some seeds of this shrub or tree. It was

in a secluded spot, and the seeds were among the droppings of a bear, or other wild animal. They had the coffee-shape, though plump and inclining to roundness, with a cut-like indentation on one side, not quite so long as some of the cultivated kinds, but which, I conceived, must be a variety of coffee growing wild. I only raised one tree from the seed I planted, now six feet in height, and well-formed by pruning. It is identical with some I saw many years ago, on the western borders of the Sierra Nevada mountains, upon which the fruit, as I then supposed it to be, was growing. I found the kernel (which I supposed to be the cherry pit) covered with a fleshy skin, which I found bitter to the taste, and which reminded me of the wild, black cherry, in its general shape and bitterness, though not so smooth or lively in color. I will send you a branch from my tree. Would like to know if it is the same as that referred to in your last issue. I. A. W. Santa Clara, March, 1874.

[The sample sent is identical in nature with those previously noticed by other correspondents, and by them forwarded to us.—EDITORS PRESS.]

Still Another.

EDITORS PRESS:—Please answer if the enclosed is the wild coffee plant spoken of in your paper lately. We call it coffee berry, the seeds of the berry resembling coffee; and the only thing I know the plant to be fit for is honey, of which the flowers furnish a rich supply. The berries look good enough to eat, but one taste of them is usually sufficient. Yours truly, J. M. GRAHAM.

Colfax, March 25, 1874.

[It is the wild coffee. The leaves are larger and somewhat heavier than other samples we have received, but this is owing, probably, only to the more advanced stage at which they were plucked.—Eds. Press.]

Stock.

The Death of the \$40,000 Cow.

The forty thousand dollars lost by the death of this cow is only an item in the list of damages to which the owners of choice stock have been subjected by losses from the same cause, abortion. This has been truly a disastrous calamity in the old dairy districts, where no efforts have been spared to secure blooded stock. The evil has prevailed during a period of several years, and though the owners are not disposed to go back to no pedigree stock, many of them look upon abortion as hereditary among blooded stock. Others consider it an epidemic which is destined to have its day.

But are we not justified in charging the breeders and owners of this choice stock with being greatly to blame in this matter, through an unwarrantable eagerness to obtain one or two points by breeding, to the neglect of other characteristics essential to the health and usefulness of the animal? Among dairymen, the only consideration is milk. They want an early milker and late milker; a flush milker and rich milker. And when, by breeding and management, they have attained, as nearly as possible, all these properties in one cow, they take the calf away from the mother too soon for the good of either, and continue milking too close upon the next coming in.

These cows, through the whole course of their lives, are pampered and petted, and put through a course of treatment, as detrimental to fruitfulness as is the routine of life adopted by the women of this country. In regard to the latter, enough is being said, and we only allude to it here to draw a parallel; and we think the parallel is so apparent, and the consequences of the violation of the laws of health are so similar, that it would be worth while to consider it, and govern our management of choice stock accordingly.

But we have even less reason to expect healthy progeny, or indeed any progeny at all from our choice stock, when we trace out the record of the lives of the males. Have our readers ever visited the stalls of any of our celebrated bulls? If they have, and have duly considered the inevitable consequences of the violation of the laws of animal health, they must, we think, have come to the conclusion that however reliable the animal may be in transmitting the characteristics of his breed, he certainly cannot be expected to transmit physical health and fruitfulness.

It is true the animal's abiding place is more like a parlor than a stall; and in feed, bedding, cleanliness and everything pertaining to stable management, he is cared for thoroughly, and even excessively. But there he stands, day after day, scarcely conscious of the changes of the seasons, his feet becoming tender, his limbs swollen, his eyes hazy, and his flesh flabby and soft. His "out-door life" consists in being led to the water trough twice a day, and back again to his harem, at a slow and solemn pace. Yet this is the source from which the neighborhood is to be supplied with its blooded stock. Comment is scarcely necessary.

We had the honor of calling upon the celebrated, Dutchess, whose decease has been telegraphed to all parts of the country, and have seen her and other members of the noted family in Mr. Campbell's stable, and we are able to judge of these results from actual observation.

We hope the owners of blooded stock on this coast will provide against this danger, and see that a system of management is adopted less injurious to the health of the animals. It is a matter in which the welfare of all departments of stock is concerned, though cattle and poultry are probably the greatest sufferers.

Shampooing Cattle.

The advantages attendant upon the thorough currying of the hair and hide are additional beauty, a better digestion, hence greater ease of fattening and on less amount of food, and directly and indirectly, an influence for good on the whole animal health, among which may be mentioned less liability to diarrhoea. Every stable, whether for horse or cow, should have its curry-comb and brush; to these some add water or weak soap suds, and a sponge. These should be used at least once in two days in warm weather, and any farmer who has not tried it will be astonished at the marked improvement in his cattle if he will only adopt this plan as an experiment even for a few days. Every one who has enjoyed the luxury of shampooing by a skillful barber after a long, dusty ride, can have some idea of how improved a cow or an ox will feel to have his or her skin cleansed of dust after a long, hot summer day. The cow thus treated will yield more and better milk; the ox or work horse, after his skin is cleansed, sleeps well and is rested; the next morning he goes forth to his work with an elastic step and a consciousness in every movement of health and strength. The time and care taken in cleaning their skins is more than returned in a better product or increased labor.—New York Times.

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