

The Cockle Bur.

This is one of the worst weeds that infest the prairies. It is not as bad as the Canada thistle, but it is bad enough for all practical purposes. Although its seeds are not scattered far by the winds they have a variety of ways of getting over the ground. They attach themselves to the wool of sheep, the hair of cattle, horses and wild animals, and to the feathers of some kinds of birds. They are swept away from fields in floods and are carried long distances in streams and rivers. They will stand more abuse than a stray dog without receiving any permanent injury. They cause a large amount of work when they spring up in fields that are under cultivation. The presence of the weeds in a grain field causes a large reduction in the crop. The burrs in wool detract largely from its value. It is now affirmed by many that the young plants are poisonous to stock. Mr. John Williams, of Logan, Iowa, in a local paper gives this testimony respecting them: "I came from Illinois ten years ago, but lived near the Illinois bottom, and one year in particular there came a wonderful flood of water and raised the river until the whole bottom was under water for five miles in width, and the cockle burrs grew largely in the bottom and washed the seed to the shore, and when the water went down these burrs came up first, and we farmers let our hogs and cattle run at large, and the first thing we knew they were dying all along the bottom at a terrible rate—hundreds died in a few days. When thorough investigation was made it was found that it was the young cockle burr that killed the stock. It is very poisonous. When very young it is sweet and tender, and being the first thing green in sight the cattle and hogs eat them greedily. Our cattle would come up at night, and in the morning there would be from three to twelve dead, and some sick. Our remedy, when in time, was heavy drenches of melted lard. On examining those that died their galls were generally large or burst, and the farmers and stock-men took their stock off of the bottom for about two weeks, until vegetation got up in good shape, and there wasn't any more of the disease." The wise law-makers of this State some years ago sought to exterminate cockle-burrs by directing a statute against them. But for some reason the weeds have paid very little attention to it. They continue to grow and multiply, and when a large crop of burrs is produced, they take the river route to the sea-board. They have invaded the sacred soil of several States where no unfriendly legislation exists concerning them. The cockle-bur will soon be to the United States what the thistle is to Scotland—a national weed. The chief difficulty in exterminating the pest lies in the fact that the seed will retain its vitality several years. The best way to eradicate it is to put the infested field in grass and not break the sod for several seasons. This cleaning process should be continued till all the farm has been "under treatment." A close lookout must then be kept for chance specimens that may appear.—Chicago Times.

Poison for Insects.

We in Iowa have had experience with the potato-bug. The first that I saw of them here at Muscatine was in 1862. They flourished several years before we were fully awake to the necessity of destroying them.

Many remedies were suggested and tried with very little effect. Hand-picking was most effectual until we got to using Paris green. At first we reduced the poison with ashes or flour, and sifted it on dry. We next mixed it with water, and sprinkled the potato vines with a watering-pot. But last and best of all is London purple, mixed with water, one tablespoonful to two gallons of water. The London purple is much better and cheaper than Paris green. I think an acre of potatoes infested with this destructive insect can be saved with this remedy at a cost of four to six dollars. But we have destroyed so many that I think there are not more than one-tenth as many now as there were a few years ago.

I have also had a light for three or four years with the canker-worm on my apple-trees. Two years ago I changed the Paris green for London purple, at a saving of three-fourths of the cost, and it proved a better article for the purpose. I take a forty-gallon whisky or kerosene barrel, saw it in two, and fasten a hypodermic sprinking pump in the bottom of the half-barrel, by nailing a strap of leather to hold the pump firmly to the bottom; and another strap to hold it fast to the side of the half-barrel. Then I have two whole barrels, with one head out, to hold the water in. Place them all in a wagon, and drive to the orchard. Put three buckets of water into the half-barrel, and stir in three small tablespoonfuls of London purple. Stir it till it is well mixed with the water, then use the pump and sprinkle the trees thoroughly to the right and left, and on all sides of them. This is the cheapest and most effectual remedy I have found for the canker-worm.

I intend to try London purple for the cabbage-worm this year, by using a rag wet with the poison, and rubbing the under sides of the cabbage leaves with it. All the lower leaves of the cabbage are gone before the head is grown. One should be careful not to use it after the head begins to form.

I do not think the ravages of the curculio can be stopped by sprinkling the trees with London purple. We find coal-tar makes a good remedy. Take a tin vessel, and put a wire to it so it can be held up with a pole under the limbs and through the top of the tree. Then put in kindlings, shavings, hay or straw, well saturated with coal-tar, set it on

fire, and smoke the trees two or three times a week, beginning when the plums are very small, and continue while the fruit is growing, or as long as there are any marks of the insect.

The green worm on the rose leaf I have killed by sprinkling with London purple. I intend to try it on the striped bug, the squash bug and any other noxious insects.—Suct Foster, in Examiner and Chronicle.

Weeds in the Highways.

Several of our Western contemporaries last winter suggested the discussion at Farmers' Clubs and otherwise of the question as to what action, legislative or otherwise, is necessary and practicable to keep the public highways free from weeds. To us, who have been among the foremost in laboring for good highways, the most practicable plan seems to be to induce abundant travel along them. When business prospers grass does not grow in the streets; and when a public highway is well-traveled there is no chance for anything to grow in it.

We were very much struck by the answer given to a Western farmer on the Centennial grounds in 1876 by an Eastern one who had grown quite wealthy. The question was how to hurry his Western farm quickly into a profitable market. He was told to "increase his taxes." This seemed no doubt absurd to the listener, as it will to most who read it; for if there is anything which more than another we all try to avoid, it is an increase of taxation. But there is a deep meaning in the expression. It means that if a property is to increase in value, one must do something himself to make it more valuable, even at the risk of higher taxation. We may carry this idea into all our worriments, and especially this one of weeds in the public highways. The more we beautify our properties, the more we attract travel by it; for people will go in preference where there is something nice to be seen. Improvements cost something. They are taxes. A man may beautify at a great cost when there is no one to appreciate his labors. Of course such work is thrown away. But no work is thrown away that attracts travel along the highways.

Our advice to our Western friends is to let "legislation" against weeds alone, and rather endeavor to encourage in every property-owner a love for improvement. Let them do all they can to encourage everybody to improve and beautify the line; and then by having good roads encourage people to travel over them, and they may take our word for it that the question of weeds in the highways will soon settle itself.—German-town Telegraph.

The Size of the Farm.

It is true enough that we cannot have immense returns from our farm if we do not have a commensurate amount of land. We cannot expect to garner six or eight hundred bushels of wheat, rye, corn, etc., from a fifty-acre farm. Nevertheless the profits from a farm are not always, or very frequently, the result of very large farms. It is the thorough cultivation of the land we have, and making the very best of everything that the profit comes in. We may have hundreds of acres of land, but it may be unproductive for the reason that we do not possess the means of properly enriching it. Hence, while we may have capital enough to run a moderate farm in the very best manner, causing it to yield double the crops that we could look for per acre from five or six times the quantity of land, we should utterly fail in making the larger farm profitable at all; but, on the other hand, we should find it year after year making us poorer and poorer, until we should be completely swamped by it. Just look at this simple statement: If a capital of five thousand dollars, expended in the cultivation of two hundred acres, will yield a profit of five hundred dollars, while if it were applied to one hundred acres it would produce a profit of one thousand dollars, it is clear that the income would be increased by diminishing by one-half the quantity of the land.

We have known many a farmer who has been bankrupted by a large farm, but who might have acquired a comfortable competency on one-half the number of acres. Farmers, as a rule, strive to own a large tract of land, without considering that they have not the capital to work it as it should be; and that unless it is so worked it must drag them down instead of building them up.

The prudent man should start only with such a sized farm as he possesses the means of conducting in such a way that it will produce him the largest return from the capital invested. He will see, then, that he is early gaining pecuniary strength, and this will relieve him from any fears that he will be likely to go down-hill, while the facts are before him as clearly as they are undeniable, that he is steadily laying the foundation for his prosperity and increasing success. Hence, let us say in conclusion, that if a farmer has one hundred acres, it would be much better for him to put the price of another hundred on it, than to buy one hundred more and make the same labor produce double the crops, and not have double labor for double crops as we so frequently see to be the result.—German-town Telegraph.

—A New York lady makes a livelihood by giving instruction to her illiterate sisters whose education in early life had been neglected. She has plenty of scholars, and receives from \$3 to \$10 a lesson—prices graded to suit their means.

Those Curious Western People.

A young man who left Detroit for Deadwood in March, in the best of health and with lots of good clothes and plenty of money, got home the other day with his weight reduced twenty-eight pounds, his elbows and knees out to the weather, and his stomach entering upon a third day's fast. He had no particular adventures to relate and no apologies to make. All that ailed him was the fact that he didn't understand those far-Western people. He didn't realize that you have got to take 'em on the run to bring 'em down, and he consequently put his foot in it at every move. Soon after reaching Deadwood, and while getting away with a dinner at a restaurant, a stranger came in and called him a snipe, and a hazzard, and a chicken, and several other ornithological cognomens, and ended by kicking the crown out of his plug hat. Now, the proper way would have been to pull out a popper and have popped that stranger until the noonday sun would have lighted up his whole interior; but the Detroitier let the golden opportunity slip away, and was whistled out of the neighborhood.

Then some one told him that he might strike a job in the railroad offices. If he had obeyed instructions he would have had all right. He was told to slant his hat on his ear, light a fresh cigar, and walk in on the magnate, and say:

"Hello! old 7x9—how's your bully health this morning? Have a smoke? Bet you will! How are all the boys, anyhow? Got a place here for a chap who's up to snuff, and the strongest brand at that? Come out and gulp something at my expense. Nothing mean about me, and don't you forget it, old pard!"

Yes, he lost the situation through his own obstinacy. He sneaked into the office like a sheep-stealer, put his hat on a chair, and faintly inquired if they would be so everlasting good as to inform him if there was a one-horse vacancy to be filled. They gave him the boss bounce inside of a minute, and after that no boot-black would look at him.

Then there was a provision dealer who was terribly in want of an assistant. The Detroitier was just the man for the place—except that he wasn't. He was put on the right track by a hotel clerk, who explained:

"Now, this Jones is rather queer, and you must strike him right. You want to go in and cuss him from his eyebrows to his toe nails, and when you get through you can pretend that you took him for old Smith, just around the corner. He's a great cusser, and he'll take to you like molasses to a shingle."

That job was also lost. The Detroitier called at the store, explained that he had heard so and so, and ended with a wishy-washy request to be taken on trial—salary no object. Old Jones heard him through, and then called him a Michigan dish-rag, an Eastern mulberry and ever so many other things, and tried to hit him in the back with a barrel of Chicago hard tack.

It was the same in a dozen other cases, and finally a prominent citizen of the town took it upon himself to halt the Detroitier on the street and say to him:

"Say, boy, this ain't no town for you. Hadn't you better git up and fly?"

The Detroitier couldn't fly, but he had a gait of six miles an hour, up hill and down. He also got a lift on a freight train now and then, and he has now returned to a people whom he can understand and appreciate.—Detroit Free Press.

Opium-Smoking in California.

Opium-smoking is a sensuous pleasure and depends for its full enjoyment upon leisure and society. The majority of the better class of Chinese in San Francisco smoke opium, but not in excess. They will lounge on their little bunks, enjoy twelve or fifteen pipes in the course of an afternoon or evening, chat, smoke tobacco, and drink tea or rice brandy. Few except the confirmed opium-smokers use the drug to produce insensibility or the opium sleep. The primary effect of opium is that of good tobacco, increased tenfold. It soothes and tranquilizes the nerves and laps the smoker in a delicious state of Sybaritic ease and voluptuous enjoyment. It induces a species of day-dream, but its effects in this regard have been greatly exaggerated. It seldom produces the drunken stupor which follows undue indulgence in liquor. The European who contracts the habit of opium-smoking usually craves an inordinate amount of the drug. A man whom I know smokes regularly every day six bits (75 cents) worth of opium, or about fifty pipes. He is a walking skeleton, and when not under the influence of the narcotic, he trembles like a paralytic. His cheeks are sunken, the bones seem starting through the pallid skin, and the whole man is a living wreck—strength, energy, will, manhood, all clean gone. He lives only for his daily indulgence in the drug, and his body could dispense with it no more than his lungs could perform their functions without air. He is a walking barometer; sensitive to the slightest change in temperature and racked by neuralgic pains when exposed to cold. Fatally insidious, too, is this opium habit. It saps the moral strength and enfeebles the will; then, shorn of these two allies, it takes a man of exceptional strength of character to free himself from its thrallhold.

The poorer classes of Chinese in California—and these comprise nine-tenths of the whole number—use opium as a solace to their hard life. It is one of the few pleasures they allow them-

selves in a slavish struggle to lay up money. No store, wash-house, manufactory or restaurant is without its opium "lay-out." The habit of opium-smoking is universal, as common as the use of tobacco among American men. A very intelligent Chinese merchant, who speaks excellent English, in a recent conversation with me on the evils of opium smoking, said: "It is the curse of our people, and is far worse in its effects than your whisky-drinking. A man who drinks liquor gets some strength from the stimulant, though this may last only a few minutes. He may even live to old age and never go to bed sober. But the effects of opium are far different. It takes away strength, it never gives any. It weakens a man, thins his blood and steals his energy. It makes him feel the cold, makes him what you call invalid—no good for any real work. He may work at a trade, but he cannot carry on any business which requires thought or calculation. For myself, I smoke a few pipes frequently with friends. It is social and pleasant, but I always take the greatest care not to smoke twice in succession at the same hour. When I feel the longing to smoke, which always attacks you just twenty-four hours after your last indulgence, I never give way to it."

The bane of opium-smoking in California is seen in the younger generation. California children are very precocious; they seem to have an exaggerated desire to indulge in everything which is forbidden. Every Chinese wash-house throughout the State is the center of evil. Young boys learn there to smoke opium and contract the habit which ruins them body and soul. The Chinese receive boys with great favor, and are always ready to initiate them into any vice. In the cities the evil is worse, as the opportunities for its gratification are met on every side. There are many squalid opium "dens" in the Chinese quarters, and these have their regular white customers. The police make frequent raids upon them, but the payment of twenty dollars fine releases the proprietor. Now it is customary for the smoker to deposit this amount before beginning his indulgence, in order to insure the release of the patron in case of arrest. The vice is most prevalent among the hoodlums of this city and the women of the town, but police officers and detectives, whose word may be relied upon, declare that the practice is spreading with great rapidity, and that the law will soon have to be invoked to check it by heavy fines or other penalties. The new treaty will have no sensible effect upon the importation of opium into this country, as the duties are low in British Columbia and Mexico, and the work of smuggling it over the border will not be difficult. As a Chinese merchant said a few days ago in speaking of the drug: "The Chinese will get it if it's on top of the earth. You might as well try to stop your Nation from smoking cigars or drinking liquor."—Cor. N. Y. Tribune.

Planning Work.

Even in housework, the brain may save the body a great deal of labor. A woman who plans her work beforehand always accomplishes a great deal more than her less methodical sister, and with less fatigue to herself. Before she rises in the morning her breakfast is thoroughly planned, and the order in which the different details are to be carried out is quite decided upon. It makes all work easier to have it thus planned beforehand, and many a weary woman might secure many bright half-hours to herself every week if she would inaugurate the system. It is like packing a trunk—you know how easy it is for one skilled in the business to put in a third more than one who piles things in "just as it happens." It is always such a pleasure to look back on a well-packed day and see just what has been done. People whose days are full of idleness and ease do not have the monopoly of happiness by any means. Those who have nothing to do except make themselves comfortable are generally peevish and discontented. Work has manifold advantages; and the woman who has led a busy life cannot be content to rest in idleness.

—One of the greatest vegetable phenomena, though not so useful to mankind as the bread-fruit, appears to be the *Polo de Vaca*, or cow-tree. This plant produces a glutinous liquid like an animal. It frequently grows upon the barren sides of a rock, and has dry, coriaceous leaves. For several months in the year its foliage is not moistened by a single drop of rain, and its branches appear entirely dried up. But upon piercing the trunk, particularly at the rising of the sun, there flows a sweet and nourishing yellow juice, having a balsamic perfume, with many of the qualities of milk. In the morning the natives of the country, in which this vegetable fountain grows, visit it with bowls, in which they carry home its milk for their children. "So that this tree," says Humboldt, "seems to present the picture of a shepherd distributing the milk of his flock." The Araucans call it the cow; the Cauerguans the milk-tree." Humboldt, Kunth, and Bredemeyer saw the fruit of this tree, but no naturalist has yet seen the flower.

—The Board of Trustees of the New York Business Men's Moderation Society have resolved to abandon the pledge and principle of total abstinence, and substitute in place of it a principle pledging themselves not to use as a beverage any intoxicating drinks stronger than beer, ale or light wines, and those only in moderation, and pledges the society to exert its influence in every honorable way possible against the use of whisky, rum, brandy and other spirituous liquors as a beverage.

Stored Energy.

The public has learned to regard with caution the recent announcements of the large possibilities of electric force, or rather of the practical application of this agent to new uses. Mr. Edison and other men of science long ago began to promise us that in a very short time our houses would be lighted with electricity more brilliantly and cheaply than they ever had been in any way; but the panic among the gas companies soon passed away and stock again rules at high rates. It is no doubt true, however, that our hopes in this respect have been deferred through unlooked-for obstacles to the practical application of the principle and not through any mistake about the principle itself. Public places are actually lighted by electricity; and private places are not yet so lighted only because of the difficulty of furnishing the illuminating agent economically. The same comment upon other unfamiliar uses of electric force is just and obvious. It has long been believed that the day would come when railroad trains would be moved by electricity; but it is only just now that we are able to say that the day has actually come. At all events, the experiments made upon the electric railroad near Berlin seem to have solved the problem.

But still more wonderful results in this branch of practical science are reported. The world was astonished when Prof. Morse started an electric spark upon a wire journey and compelled it to record a message at its journey's end. Hitherto the varied application of the force has been a mere expansion of this conception, at least in this respect, that the force has worked upon an unbroken line of operations. Its communications, so to speak, have not been cut. So far as this the force which carries a message from New York to Albany, the force which runs through the cable, beneath the Atlantic, and the force which by and by will light a whole city work in the same uninterrupted way. But it seems to be quite another thing to pack electricity in your trunk at New York, check it to Albany, and there make it to do, with unimpaired alacrity and effect, the work which it would do here. Yet this is the startling result which our esteemed contemporary, the London Times, has been instrumental in bringing about. Other esteemed contemporaries have made themselves famous by getting early news of remote military movements—news sometimes of which the commanding Generals concerned in the events were themselves ignorant; in piercing the heart of Africa, and in making renewed search for the pole. But if all which is suggested grows out of a recent journey of a correspondent of the Times from Paris to Glasgow, that newspaper has celebrated itself more successfully than any of the others.

On the 9th of May M. Faure, of Paris, charged four batteries with electricity, inclosed them in a wooden box measuring a cubic foot and handed the box to the Times' correspondent, who seventy-two hours later delivered it to Sir William Thompson, of the Glasgow University. The remainder of the story is told by Prof. Thompson in a letter to the Times: When the batteries were taken from the box it was found that they had lost little or nothing of their stored electric energy. By measurement and by other tests the force was shown to be when it arrived in Glasgow substantially what it was when it quitted Paris. This, we repeat, seems to be something very different from sending electricity along a wire, whether to write a message or to light a lamp. In these cases the working of the force is unbroken between the place where it is evolved and the place where it is finally applied; but in the latest case there is no such connection. In other words, the storage of electric energy, if it is an accomplished fact, may be productive of the largest results. When the correspondent handed the box to the professor—provided, of course, all that is suggested comes to pass—he may be said to have symbolized a coming revolution in many methods of modern life.

With stored energy every householder may keep his electric light supply in his own cellar; with stored energy ships may plow their way across the ocean without the aid of steam or the fuel which is consumed in creating it; with stored energy railroads may be operated free from smoke and cinders; with stored energy manufactures may be conducted on a large or small scale safely and inexpensively; with stored energy coal may be largely dispensed with, and the question, What will become of England when her mines are exhausted? will be of no consequence. The Times itself looks forward to this solution of the problem with pleasing anticipations and hints at a London "smokeless and clean, uncontaminated either by the solid or by the gaseous products of combustion." It is unselfish enough further to show how America may turn stored energy to the most profitable account. Looking upon the Falls of Niagara as "the natural and proper chief motor of the continent," it says that we may yet see stored electricity, evolved by this enormous water-power, carried by electric railroads to all parts of this country for use for all the purposes for which coal is now directly or indirectly used. In that event we may have some to spare for shipment to Europe.

All of these things may happen, but conservative people will bear in mind the possibility that they may not happen in the time of any person now living. Still, who shall say?—N. Y. Evening Post.

—A number of the most fashionable ladies in New York are vying with the Chinese mandarins and letting their finger nails grow without ever trimming them, then seraping them until they are of a chalky whiteness.