

## GOOD HEALTH.

## The Causes of Decay of Teeth.

It has been charged against our brethren of the dental specialty, says the *Lancet*, that they are woefully at fault in regard to knowledge of the commonest of all things—caries of the teeth. That they extract teeth with skill, and stop them with even more skill, and in a nobly conservative spirit, is admitted; but the causes of decay in the teeth have remained obscure. The investigations of Leber and Rottenstein into this subject have at least the charm of pointing to definite conclusions. They admit, of course, that there are differences of teeth, constitutional and connected with race, making teeth more or less resistant to the great influences which determine decay. These are not, according to these authors, internal and vital so much as external and chemical. The process of decay begins from the surface, and if it can be controlled or arrested at the surface, it is entirely controlled. The great causes of caries are two, namely, acids and a certain fungus found abundantly in the mouth, *leptothrix buccalis*. This latter agent is characterized by certain microscopic appearances and by its reaction with iodine and acids, which give to the elements of *leptothrix* a beautiful violet tinge. Under the microscope the fungus appears as a gray, finely-granular mass or matrix, with filaments delicate and stiff, which erect themselves above the surface of this granular substance so as to resemble an uneven turf. The fungus attains its greatest size in the interstices of the teeth.

No one can deny now-a-days the action of acids on the teeth, even weak acids, in dissolving the salts of the enamel and the dentine. All acids, both mineral and vegetable, act promptly on the teeth. Various experiments as to the action of acids on dental tissues are given, making the enamel, naturally transparent, first white, opaque and milky, and in a more advanced state, chalky, and then the dentine more transparent and softer, so as to be cut with a knife. The acids which may actually effect the first changes in the production of caries are such as are taken with food, or in medicines, or such as are formed in the mouth itself by some abnormality in our secretions, which should be alkaline, or by an acid fermentation of particles of food. But acids alone will not account for all the phenomena of caries in the teeth. They play a primary and principal part, making the teeth porous and soft. In this state, the tissues having lost their normal consistency, fungi penetrate both the canaliculi of the enamel and of the dentine, and by their proliferation produce softening and destructive effects much more rapidly than the action of acids alone is able to accomplish.

It is not pleasant to think that fungi exist in the mouth of all but the very cleanest of people. Bowditch, in examining forty persons of different professions, and living different kinds of life, found in almost all vegetable and animal parasites. The parasites were numerous in proportion to the neglect of cleanliness. The means ordinarily employed to clean the teeth had no effect on the parasites, while soapy water appeared to destroy them. If this be a true version of the causes of caries—the action of acids, supplemented by the action of fungi—then it follows that the great means of preserving teeth is to preserve the most scrupulous cleanliness of the mouth and teeth, and to give to the rinsing liquids a slightly alkaline character, which is done by the admixture of a little soap. This is not so pleasant a dentifrice as some, but it is effective and scientific. Acids not only dissolve the salts of the teeth, but favor the increase of the fungi of the month. No increase of fungi and no action on the dental issues occurs in solutions slightly alkaline, as of a weak solution of soap. The good effects of stopping teeth, in the light of these experiments, are intelligible. The penetration of acids and fungi is prevented.

## Color Blindness.

The derivation of the designation of an affection of the eyes very commonly known as Daltonism (color blindness) is, as many of our readers are doubtless aware, from the name of the great philosopher, the propounder of the atomic theory, who was attacked by it. Properly speaking it is simply incapacity on the part of certain people to judge of color, or more accurately, of certain colors. Dr. Favre has communicated to the Congress at Lyons the result of the researches, which, as chief physician of the Paris and Lyons railway company, he has made on the subject, the object being to determine what influence this disease of affection may have on the general safety of travelers. According to this report, among 1136 different individuals examined from 1864 to 1868, thirteen cases of red-color blindness and one of green were found. Again, among 728 subjects examined between 1872 and 1873 he tested forty-two of color blindness more or less developed. He further estimates the number of people in France suffering from this malady at nearly a million, and gives, as the most common causes of it, wounds, typhoid fever, syphilis, etc. The danger of such a disease existing, and possible in some instances without the knowledge of the subject or of his employers, is one which deserves attention, for although we cannot point ourselves to any instances in which errors have been made through it, nevertheless, Dr. Favre, as we understand him, is able to do so, and we quite agree with him, when he says that the only effective preventive of the dangers which may possibly accrue from such a malady is a periodical optical inspection of all men who have to deal with colored signals, a mistake in the use of which might lead to such disastrous results. We recommend inquiry on this subject to locomotive superintendents and traffic managers.—*The Engineer*.

**EATING WHEN SICK.**—It is the custom among a certain class of people, when a member of the family falls sick, to begin at once to ask, "Now what can you eat?" Every one who has heard of the old story of the man who always ate eighteen apple dumplings when he was sick. On one occasion when he was engaged upon the eighteenth, his little son said, "Pa, give me a piece." "No, no, my son, replied the father, 'go away; pa is sick.'" When a young man has suffered in season and out of season until exhausted nature gives way, and a fever is coming on, the good mother is in trouble. She anxiously inquires, "Now, John, what can you eat? You must eat something! People can't live without food!" Then comes toast and tea, etc. The stomach is exhausted, and no more needs stimulating or food than a jaded horse needs the whip. What is needed is rest. Nine-tenths of the acute diseases might be prevented by a few days' starvation when the first indications appear. I don't mean complete abstinence in every case, but perhaps a piece of coarse bread, with cold water for drink. If such a policy were generally adopted, what ruin would overtake the medical profession. How many physicians would lack for patients.—*Health and Home*.

Is the hydropathic treatment, drinking cold water immediately after rising, provided that breakfast be not taken for at least half an hour, is prescribed. The explanation given is that the internal douche acts upon the stomach as a tonic, in the same manner as cold applications externally, upon the skin.

## Action of Tobacco Smoke.

According to Messrs. Vohl and Eulenbergh, the amount of nicotine in snuff and tobacco for chewing is so minute that nothing like nicotine-poisoning can result from their use. The action of tobacco-smoke and tobacco-juice is not due to nicotine, for it contains none, but to pyridine, picoline, colledine, and other bases, forming a homologous series, which are produced during the combustion of the tobacco. The reason why stronger tobacco can be smoked in a cigar than in a pipe is, that in the pipe a large quantity of pyridine is formed, which is very volatile and stupefying; while in a cigar little pyridine and much colledine are formed. The unpleasant symptoms experienced by persons just beginning to smoke, or who smoke to excess, as well as the poisonous effect of tobacco-juice, are not due to nicotine, but to the pyridine and picoline bases; and they have probably been attributed to nicotine because these bases, especially those having a high boiling-point, greatly resemble nicotine both in smell and in physiological action, producing contraction of the pupil, difficult respiration, convulsions and death.

They do not act so quickly when injected under the skin as when taken into the stomach, and their action is less rapid than that of nicotine. Other plants which are sometimes used for smoking, though they contain no nicotine, such as dandelion, willow wood and stramonium, yield pyridine bases, whose action are very like those from tobacco, though rather weaker. Pure picoline from Boghead coal had a similar action; and its vapor was poisonous, producing irritation of the respiratory passages, slight convulsions, and death. None of these, except the bases from willow wood, produced contraction of the pupil. The authors consider that the effects produced by opium-smoking are not due to the alkaloids in the opium, but to the bases formed during its combustion; and that the difference between it and tobacco is owing to different bases being formed by their combustion.—*Arch. Pharm. and Chem.*

**BORAX FOR COLDS.**—A writer in *The Medical Record* cites a number of cases in which borax has proved a most effective remedy in certain forms of colds. He states that, in sudden hoarseness or loss of voice in public speakers or singers, from colds, relief for an hour or so, as by magic, may be often obtained by slowly dissolving, and partially swallowing, a lump of borax, the size of a garden pea, or about three or four grains, held in the mouth for ten minutes before speaking or singing. This produces a profuse secretion of saliva, or "watering" of the mouth and throat, probably restoring the voice or tone to the dried vocal cords, just as wetting brings back the missing notes to a flute when it is too dry.

## DOMESTIC ECONOMY.

## Washing Machines.

(From the Pacific Rural Press.)

EDITORS PRESS:—I wish to make some suggestions, through your paper, to the inventors of washing machines. I have studied washing machines for several years, and have been in the habit of buying one occasionally only to throw it away—not because the machine would not do good work, but because it is more trouble, or rather, harder work, to wash with one than to use the common board. I do not think it much of a feat to get up a "washing machine," but anyone who contrives a washer which can be run by some other power than that of a poor, sickly woman will have done something worthy of notice. What would we think of a man who would invent a threshing machine to be run by man power? Do you think he would be able to sell many? As Artemas Ward would say, I rather think not. There are many different motive appliances which could be attached to washers. For instance, there might be used a wind-mill, a small one-horse power, a water-wheel, etc. Where these are not convenient, a goat, dog, cat or even calf, on a light, upright power wheel, ten feet in diameter, would produce sufficient power to easily run a washing machine made on the rotary plan, with rubber above. My word for it, the person who invents a washing machine of this kind will be well paid for it.

Those who would oppose the plan here advocated, on the ground of its being too costly, should bear in mind the difference between the price of a scythe and a mowing machine, or between a paper of needles and a sewing machine, and reflect whether this difference in the first cost deters users from buying the contrivance which will do the work with least labor. I will guarantee that the cost of a good motor, to be attached to washing machines, will not be more out of proportion, compared with that of the wash-board, than the mowing machine is to the scythe, or the sewing machine is to the needles. We want a washing machine which will make a Chinaman say "no like John." I should like to hear from you and others on this subject. SOAP SUDS.

[Our correspondent has hit the nail on the head in arguing that the fault is not in the washing machines but in the want of an adequate motor. One of the great questions now perplexing the minds of inventors is to produce a household motor which shall be capable of doing ordinary light work, cheap in first cost and running expenses, and not liable to get out of order, nor to serious accidents. There are a great many contrivances proposed for this purpose, and the number of patents annually taken out in this department of invention, show that thoughtful minds fully appreciate this, one of the great needs of the day. Several low power motors are now before the public, but none, so far as we know, intended for the purpose of driving washing machines. There are the Hyde water wheel, the diminutive Baxter (one-quarter to one-sixteenth horse-power), the Nicholson engine, and the numerous hot air engines. Some one has lately patented a set of appliances by which the waste power evolved in using a rocking chair may be utilized to work a churn and rock the baby to sleep; but for a washing machine motor, we want something entirely stronger and more serviceable—a motor, not a toy. When the main question of producing a good, universal low power motor for domestic use shall have been solved, "Soap Suds" will receive a satisfactory answer, and not, we fear, till then.—*Eds. Press.*]

## Cake Without Eggs.

"Housekeeper" kindly sends us two recipes for making cake, to be used when eggs are not to be had—or when they retail at seventy cents a dozen—which she recommends. The first is known as

**MARY'S TEA CAKE.**—One-half cup shortening, two cups sugar, one cup sour milk, one teaspoonful soda, two full cups flour; season according to taste. The second recipe is for

**JELLY CAKE.**—One cup sugar, one of sweet milk with a teaspoonful of soda stirred in, two teaspoonfuls cream tartar sifted in, one and one-half cups flour, two tablespoonfuls shortening; bake thin and quickly.

Water can be used for either of these cakes if milk is not convenient.

## HORTICULTURE.

## The Rose-Peachblow Potato—A Few Questions.

EDITORS PRESS:—Last year I procured from G. N. Smith, of Berlin, Wisconsin, two pounds of his new seedling potato, called the Rose-Peachblow. They were planted about the 12th of March, and in this county little or no rain fell after that date. The soil was new and sandy. In ninety days I dug potatoes larger than a hen's egg, and of a flavor and delicacy surpassed by none. The yield was light, owing to the dryness of the season, but I saved about thirty pounds of seed potatoes, intending to try them under, I hope, more favorable circumstances. The plants produced no blossom, and the young potatoes hung in clusters directly around the parent tuber. I should like to hear from any of your readers who may have tried them on this coast, and I will report again the coming season to the *RURAL PRESS*, my success with them.

I wish to inquire the proper time and manner of planting okra seed, also egg plant. I have a sunny exposure almost free from frost, about 500 feet above the level of Monterey bay, and in sight of it. I am advised to try the raising of oranges and almonds. Do you think with proper cultivation they could be raised to advantage without irrigation?

D. G. ISORAHAM.

Leafy Glen, Santa Cruz Co., Feb. 8th, 1874.

[With regard to planting okra—it may be done as early as possible, and escape the late frosts. The plant grows about two and a half feet high. It may be planted either in hills or rows; better the latter, and with width between sufficient for proper cultivation.

The egg plant requires about the same mode of cultivation as the okra.

We see no reason why orange or almonds may not do well in the locality you describe. The matter of irrigation depends something upon the nature of the soil; good soil is needed, and irrigation will be required unless there is permanent moisture in the soil within six or eight feet of the surface. Some irrigation will almost surely be needed for the first and second year, until the trees have become well established, and been able to send roots down to natural moisture.

Will some others of our readers furnish us their experience in cultivating the Rose-Peachblow potato?—*Eds. Press.*]

—From the S. F. Pacific Rural Press.

## Upturned Trees, Tap-Roots, Etc.

(From the Pacific Rural Press.)

EDITORS PRESS:—"As the twig is bent, the tree's inclined," does not refer merely to its external appearance.

The French people have taught the world that by holding the limbs down by weights, so as to check the flow of sap, it would bring the fruit tree into bearing sooner; the philosophy being that the roots sympathized, and were also checked in their growth, and made to throw out laterals; by a law of nature mere fibers, which were shown to be the real fruit feeders; i. e., that these minute rootlets, with their little, living, sucking mouths, absorb the earthy ingredients which go to make the fruit. And this is the reason why trees with the tap-root removed will be brought into earlier bearing.

With this view of the subject, fruit is considered in the light of an excrecence, and does not appear on the tree in a perfectly normal condition, as from the seed in a much longer time.

Nurserymen frequently have trees bearing, only one year old, in the nursery rows. A gopher may have nibbled at the root, or a string tied in the grafting, and not rotted or removed, may have "chorded" it. Any thing which disturbs the free circulation of the sap, as the hot weather of our summers, summer pruning, etc., will disturb the equilibrium, and cause fruit buds, which develop, under favorable circumstances, into the choicest fruit. Too many fruit buds may form; and if the tree takes a very vigorous growth afterwards, the fruit blossoms or the fruit may all drop off. It becomes an important consideration to the fruit grower, to know how to grow fruit, and also how to grow wood, at his pleasure.

The French, especially, graft their pears on quince roots, which have by nature, an abundance of fibrous roots, and bring their trees almost immediately into bearing. They do the same with the apple, by grafting on the Paradise stock; and also with the cherry, by working it on the Morello stock. They also root from the Standard tree, thereby inducing rootlets.

The Chinese understand this system of dwarfing trees and plants, which they do by removing them from pots or boxes, so as not to disturb the soil, and prune their roots. This they repeat, till they finally produce the most beautiful looking shrubs, trees and plants, with their delicate and rich foliage, so much admired.

The observant horticulturist is generally able to tell the shape, size, and consequent value of the seedling for grafting, before removing it from the nursery. It becomes not only a matter of curiosity to him, but of utility as well, to know how to make roots or rootlets, at his pleasure. If he plants out quince cuttings, that he may obtain roots for pear grafting, his experience teaches him, that if he puts them in deep, he may expect a very large quantity of small roots unfit for grafting; some, perchance, no larger than the hair on his head, and not sufficient to ensure the life of the cutting, and certainly not capable of sending up much top growth, if it lives. But if the cutting had been put in the proper depth, say 4 inches in adobe or other heavy soils, and no deeper than necessary in any case, he would have had roots for grafting one year from the cutting, and which would have been indicated by the growth of the top.

Now, we ask, why are trees blown down? And is there a preventive?

We are assured that the tree that takes deep root in the soil will defy the winds, and rather break off than upturn. This is particularly the case with the tall-growing trees that naturally go deep in the ground. The Eucalyptus, or gum tree, is one of this kind, very popular here just now, the only objection to it being its liability to blow down. But this is chiefly in heavy soils, that the roots can not penetrate, or where the tap root has been removed or broken off. Of course, the latter evil can be remedied by great care in transplanting; and, more especially, if the trees are transplanted when quite small. But, in case of very heavy sub-soils, this precaution will not suffice. I have in mind a belt of fallen trees, near Victoria, on Vancouver's Island, where the sub-soil is a deep bed of tough clay. The tap-roots could not penetrate this soil more than a few inches, or feet at most; and, although the trees had grown quite large, from the ocean moisture which they had drunk in through their foliage, the roots had only crept along in the surface soil, cramped, and in a net-work, inclosing the earth as they upturned, while the clay bed was only a base on which the whole body of the tree rested. Trees resting on a rocky bed will also be influenced in their shape,

and be liable to blow over. In case of irrigation, or where the ground holds moisture near the surface, the roots will not go deep, and this is another of the causes for trees blowing over.

If you will cast your eye, Mr. Editor, from your home in Oakland, to the highest hill in the eastern part of that rising city, you will see a very tall gum tree, on that very dry ground where it is eighty feet down to well water. That tree has gone down, also for moisture, and is securely imbedded in the land. It is true that the fog coming in at the Golden Gate, which climb up and creep along the mountain ridges in the back ground, also feed the foliage with moisture and nutriment.

Let us select an oak from the clusters near by, hundreds of years old, in soil so loose and dry that the plow may run close to the tree's body. Throw rubbish about the body, mounding it so as to hold moisture near the surface, and in two years the plow will meet with roots as large as your arm. I know of no better way to insure trees against the wind, in heavy soils than to bore a hole with a post auger, filling in below and around the roots with loose or gravelly soil, so as to induce them downwards, where they may become securely established. There is more in root ology, (if I may be allowed to coin a word), in connection with all the products of the earth, than is generally dreamed of in our philosophy.

I. A. W.

Santa Clara, March 4, 1874.

## Notes of Travel.

## Stanislaus County.

EDITOR PRESS:—Continuing our journey from Stockton, the traveler soon reaches Farmington, a small settlement some seventeen miles from Stockton, surrounded by a rich farming country, and settled by thrifty husbandmen. From thence a few hours' ride through beautiful meadows, over rolling and verdant prairies, and past refreshing rivulets, brings you to

## Knight's Ferry.

The region of the orange, the lemon, the grape, and the almond, and all delicious fruits. As you approach this village, the scenery becomes more and more beautiful. In the distance the snow-clad peaks of the Sierras rise in majestic grandeur, while nearer are the foot hills with their verdant forests rising in diminutive comparison to the craggy cliffs of the loftier mountains beyond.

In a quiet valley, surrounded by hills, which, from this point, continue to rise gradually toward the mountains, and along the banks of the Stanislaus, the people of Knight's Ferry enjoy a country possessing all the necessities, comforts and luxuries which this life need covet. The noise of the pick may be heard from some 500 miners, who still continue, in this vicinity, the search for the glittering metal, which formerly so abounded here. Quarries of the finest building stone are to be found here in abundance, and water power sufficient to drive all the spindles of Lowell and Manchester combined. This country possesses greater natural facilities for manufactures than any we have heretofore met with in California. It, however, can only boast of one solitary grist mill, but that is a very superior one, and has proved to be a good investment for its owners.

Your correspondent here had the pleasure of beholding, for the first time in his life, the orange and lemon matured upon the tree, and they look beautiful indeed. The principal fruit-raisers and wine-producers of Knight's Ferry are the Pentland Brothers—the first settlers and miners in this vicinity, who located here 25 years ago—Messrs. Schell & Krause, Mr. Stewart, Mr. Winters and Mr. Roberts. These gentlemen have experimented largely in the production of all kinds of fruits. Palmyra figs, several kinds of grapes, such as muscat, black morocco, purple Damascus, flame tokay and black Hamburg. They also raise some twenty other varieties, but those above mentioned receive the chief attention. They also raise large quantities of apricots, nectarines, peaches, apples, pomegranates, pears, plums, oranges, lemons, olives, and are experimenting with the palm date.

Cotton flourishes and yields well here. There is also a large stretch of country here favorable to the growth of the sugar beet, well watered by the Pentland Bros. ditch; a gigantic enterprise for which they deserve commendation. This ditch is about six miles long, with an average of six feet in width by three in depth. It furnishes all the water needed for irrigation and mining purposes. The above named gentlemen have all been successful in their experiments, and are exultant over the rich and luxuriant country which it has fallen to their lot to settle. This may also be called

## The Country of the Vine.

Your correspondent had the pleasure of visiting the Red Mountain vineyard of Messrs. Schell & Krause, located in the foothills on Little John's creek. The main building is 80 by 40 feet, of concrete, two stories high, having a cellar which is tunnelled directly into the hill, 100 feet long, 8 feet high, and 16 feet wide. At the end of this excavation it turns at a right angle and proceeds another 100 feet, with the same dimensions. This tunnel or cellar may be entered at either end. Mr. Stewart has also a tunnelled cellar; but on a much smaller scale.

The annual product of wine at the Red Mountain vineyard is about 50,000 gallons, and they have now on hand about 80,000 gallons. Some 1,000 gallons of brandy are also produced. About 20 men are employed on the average. Pentland Bros. produce from three to five thousand gallons yearly, and ship large quantities of fruit to San Francisco. Raisins are prepared and boxed here in enormous quantities by Schell & Krause and the Pentland Bros. Messrs. Dikin, Roberts and Winters, take great delight in their beautiful gardens, ornamented with various kinds of fruits, and the almond, which flourishes finely here. Messrs. Horsely, Meenes, Cooper, Lane, Kappelman & Williams, Booth & Sons, Cook and Carey, are all extensive raisers here, and, with one accord, agree that the present season is more promising than any they have heretofore experienced. Upon enquiry, I find that

## All the Finest Pastures

Of Stanislaus county are situated around Knight's Ferry. We sincerely hope the good and industrious people of this luxurious region may long live to enjoy their blissful homes, and the luxurious fruits with which they abound. May they also continue to enjoy and derive profitable information from the weekly visits of the *PACIFIC RURAL PRESS*, as in years ago. For they have stated to me that they attribute, in a large measure, their success in their more recent agricultural experiments and pursuits to the instruction and hints which they have gathered from time to time, from its columns. Yours truly, C. M. D.

Knight's Ferry, Feb. 20, 1874.

—From the S. F. Pacific Rural Press.

**TRANSFERRING PICTURES TO GLASS.**—Coat the glass with a varnish of balsam of fir in turpentine, then press the engraving on smoothly and evenly, being careful to remove all air bubbles. Let it stand for 24 hours, then dampen the back sufficiently to allow the paper to be rubbed off by the forefinger, rubbing it till a mere film is left on the glass, then varnish again.—*Sci. Am.*

## POULTRY YARD.

## Care of Young Turkeys.

(FROM THE PACIFIC RURAL PRESS.)

EDITORS *RURAL PRESS*:—Will you or any of your correspondents please inform me through the columns of your valuable paper, the cause of the legs and feet of young turkeys, 10 days old, swelling; a trouble which proves fatal in two or three days; also, what remedy, and what food is most suitable for them at that age; also what is good for gapes in poultry? J. D. E.

Los Angeles, Feb. 20.

[We could answer the question with regard to the lameness of the young turkeys, more intelligently, if we knew something of their treatment and diet. Young turkeys often become lame and die, from eating too much curd. The curd seems to weaken them. For a remedy in such a case give them less curd and more meal cooked in the form of heavy pudding. In the case of our correspondent, we would say it would be safe to change the diet, somewhat, at all events; also be very careful of exposure, and keep them out of wet grass, etc.

A very good and safe feed for turkeys is—Indian meal, 2 parts; wheat bran, 1 part; thoroughly cooked and cooled. When fed, stir in a little sour milk. Curd may be fed once a day to advantage and safely. Move the coop every night, and cut up a few onion tops for them, very fine, every other day.

With regard to the gapes in poultry, Mr. Fallon of Oakland, who has fed poultry twenty years says: Great care should be taken to keep the nest and eggs clean in sitting. Sulphur may be sprinkled on the eggs to good advantage. Microscopic (invisible) insects almost always get on the shells, and as soon as the chicken thrusts its bill through the shell, the insects enter the nostrils, where they lay their eggs, from which worms are hatched, and hence the gapes.

This disease is very common. Both turkeys and hens, and in fact all domestic birds, are subject to it. The disease often proceeds from unwholesome or impure food or water. It is also epidemic, when it once makes its appearance among fowls. It is most commonly caused by a worm which infests the windpipe, perhaps always, but in some cases no worm is visible to the closest scrutiny of the naked eye.

There are several modes of treatment, the one generally most successful is as follows: Take a small quill feather, strip the same of its feathers except a half an inch at its top; this should be dipped in spirits of turpentine and then forced down the windpipe, and turned once or twice. The turpentine generally destroys the worms, and the coughing naturally excited throws them out. After such treatment the turkeys or chicks should be cared for more closely for a few days and kept free from dampness and chilly winds.—*EDITHA PARRIS.*

EDITORS PRESS:—One of my neighbors bought one dozen spring chickens, last September, of mixed common stock—fed them a little wheat in the morning, and about noon scalded a little ground barley, and about three times a week cut up two onions and mixed the same with the barley. Charcoal from the stove was also pounded, and freely eaten by them. In November they commenced laying, and ever since, through all the cold and severe weather, he has had one and a-half to three dozen eggs each week (week before last 45, and last week, 44 eggs) from ten hens. They have all wanted to set, and up to the present time four or five days was all that was necessary to break up the notion. Can you tell us the best way to break hens from setting? G. A. FISHER.

Quartz Mountain, March 2.

Where hens are kept more especially for the increase it is always best to let them set when they desire, and give their chicks to *capon*s, who will care for them and bring them up just as well as the mother hen. If you really desire to break a hen from setting, of the many ways to do so we would prefer the following: Have a small coop made with a floor raised a few inches above the ground, and made of laths placed cross ways, with openings to give a free circulation of air from underneath. Place the coop in a cool place. The desire to set is attended with a high fever which should be alleviated as much as possible. A young and vigorous rooster might be placed in the coop with them. Ducking and standing hens in water, under such circumstances, is barbarous. It is a natural and honest desire which should be treated considerately.

—From the S. F. Pacific Rural Press.

EDITORS PRESS:—There seems to be a great deal said about poultry just now, so I thought I would say something too. Last year I commenced with about 30 hens of the common variety, and one Light Brahma rooster. I raised four hundred chickens; and I have now about 300 hens, which for beauty and laying qualities cannot be beat for miles around. For food I use cracked corn soaked in sour milk, which I think is excellent. I think as Mr. Carter says, that small pens are good for any breed, for I have tried it. I have a trio of Light Brahmas accommodated thus, and they lay splendidly. I have seen nothing in regard to grafting; and would like to know when is the proper time to graft apple trees.

Tonawanda, February 16, 1874. L. P. STUMP.

—From the S. F. Pacific Rural Press.

**NATURALIZED WEEDS.**—Two hundred and fourteen of our weeds have been introduced from foreign countries, and chiefly from England. In 1857 only 137 foreign weeds were enumerated in our catalogues. In 1872 a book entitled "New England Barities" gave a list of 22 plants, which the author spoke of as having sprung up since the English took possession. Among these the plantain, "white man's foot," is mentioned. In 1758 the food flax, or butter and eggs, also then known as the "Baasted weed," from the name of the gentleman who introduced it into Pennsylvania as a garden flower—had overrun the pastures of that province, and had caused many anathemas by the farmers against the unlucky introducer. The common chickweed is said to have been first sown in South Carolina as food for canary birds, and the presence of the Scotch thistle is accounted for as due to the *unor patrie* of an enthusiastic Highlander, who brought it hither as an emblem of the pugnacity of his countrymen. Another record says we have the thistle through the carelessness of a clergyman who brought hither a bed of thistle down, and, on changing it for feathers, spread it and the seeds it contained broadcast over the country.—*Tri-bune*.

**WHY ALCOHOL CURES RATTLE-SNAKE BITES.**—The experiments of Professor Bizz, of Bonn, in regard to the effects of alcohol on animals, are exceedingly interesting, in-as-much as he seems to have discovered the reasons why alcoholic stimulants were so useful in cases of snake poisoning. He found that when decomposed blood was introduced into the veins of the living animal, all the symptoms of putrid fever were shown, the temperature increasing until death ensued. Alcohol reduced the heat, retarded the putrid process, increasing the action of the heart. This seems to be precisely the effect of alcoholic stimulants, when administered in case of rattlesnake poisoning.