

FARM AND GARDEN.

A CHEAP AND PRACTICAL POULTRY HOUSE FOR THIRTY FOWLS.

Prizes Offered for Exhibits in Horticultural Products—Agricultural News from Many Sections of the Country—How and When to Prune Blackberries.

Amateurs are always at a loss as to the best time and best methods of pruning. The experienced grower knows that good fruits alone yield him profit, while the production of inferior ones is inevitably connected with a loss.



BLACKBERRY PLANTS.

For the benefit of amateurs we let an experienced grower give a chapter from every day life. Following are Mr. E. P. Roe's opinions, as expressed in Orchard and Garden.

In order to make the matter quite plain to beginners, is published a cut showing two blackberry plants as they appear on or about the 1st of February, when properly pruned last season.

Blackberry and black raspberry plants when thus pruned ought not to stand over three feet high. For the red raspberries, Mr. Roe prefers the "pinching back" method in the fall, without any further pruning.

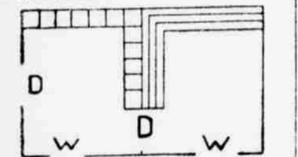
Now is a good time to feed your crops. Well composted barn yard manure, free from wood seed, is all right for strawberries and raspberries.

A Convenient House for Fowls. There is no kind of use to feed fowls well and then fail to keep them warm and dry.



A PRACTICAL POULTRY HOUSE.

The sketch for a poultry house here given is designed for twenty-five to thirty fowls, and makes a practical and comfortable house.



GROUND PLAN OF POULTRY HOUSE.

Line the whole inside with black building paper for warmth. The tar in dark paper is not inviting to lice and other vermin.

A World correspondent, who has tested this poultry house, says with regard to breeds: "I prefer the Plymouth Rocks and Brahmas for the whole year round to any other."

"The tidy little Leghorn is considered a non-setter and an everlasting layer. It is constitutionally shy, nervous and peppy, and cannot keep still long enough to hatch out a family of chickens."

"The only objection I ever heard against the Rocks is that they like to set pretty often. I think myself they do, but they are easily broken up and soon return to their former usefulness."

How and When to Run the Plow.

As the time and manner of plowing varies to meet the requirements of different soils and localities, no definite rules may be laid down by which to govern the operation, but each piece of land must be considered by itself and broken up at a season and in a style best suited to its own necessities.

matter which will assist each farmer in deciding whether he shall practice fall or spring plowing, and at what depth to set the plow.

The depth of the soil and the character of the subsoil, must determine the question of deep and shallow plowing; the subsoil, as a rule, ought not to be brought out of its bed except in small quantities, to be exposed to the atmosphere during the winter and spring, or in a summer fallow, nor even then except when such fertilizers are applied as are necessary to put it at once into a productive condition.

To sum up the whole subject briefly: thin soils with worthless subsoils must be plowed shallow until the farmer can afford the expense of subsoiling and heavy manuring for a number of years.

A schedule of prizes offered by the Massachusetts Horticultural society for the year 1887 has been issued. As competition is open to all persons the attention of exhibitors is particularly called to the rules and regulations found in this schedule, which can be obtained, until the stock is exhausted, on written application to the secretary, Robert Manning, Boston, Mass.

Inoculation of Cattle. Dr. McLachlan, live stock inspector for Canada, is opposed to inoculation of cattle for the prevention of pleuro-pneumonia. He is reported as saying: "In every country in the world where it has been impartially tried and reported on the report has been unfavorable."

Water on the Farm. There need never be any scarcity of water suitable for farming purposes in locations that are favored with an average rainfall, provided what falls on house and barn roofs be saved in cisterns.

In the Vineyard. Vines that were properly pruned last fall require but little attention now. If however, pruning was neglected, it may be attended to whenever the weather is mild.

Salted Butter. Many dairy authorities agree that the salting of butter is bad dairy work. The idea that it keeps the butter is an error.

Agricultural Notes. The Russian minister of agriculture reports the deficiency in the winter wheat crop of 1886 to have been 27 per cent, as compared with the last four years.

California nurserymen are importing large stocks of cherry, plum, apple and pear seedlings from France.

The Vermont State Agricultural college has a "winter class" for farmers, a capital idea.

Reports from the principal wheat growing states continue to be generally favorable, with the exception of those from Illinois and Kansas.

A western inventor claims that prairie grass, ground into a pulp with corn stalks and pressed into blocks, makes an excellent substitute for wood and coal.

The kitchen window is the best place for plants; the steam from the boilers and kettles keeps the air moist.

Flour spoils very easily. During the months from October to April but little change takes place in good flour; but from spring to August a fermentation is carried on, which gives rise to an offensive odor and which, once started, progresses throughout the winter following.

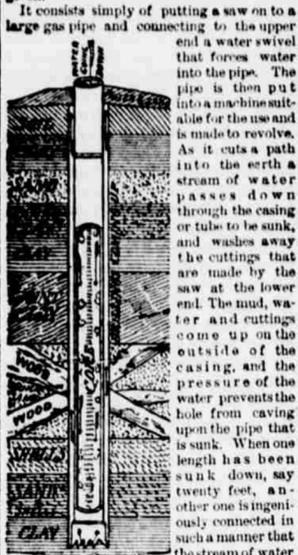
The highest apple orchard in the United States is reported to be at Hot Springs, Lake Tahoe, Cal. The trees bear well. This is said to be the greatest altitude at which this fruit is grown in this country, being over 8,200 feet above the level of the sea.

SCIENCE AND PROGRESS.

A NEW SCIENTIFIC METHOD OF SINKING WELLS.

Description of the Peculiarly Interesting, Though Usually Quite Harmless, Effects Produced by Lightning Striking in the Loose Sand on a Hill Top.

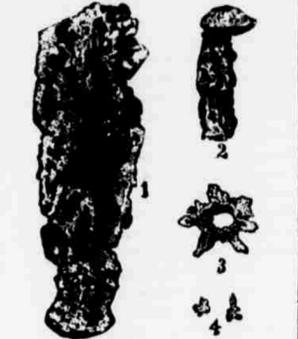
A new scientific method of sinking wells, as operated by the American Well works, Aurora, Ill., is illustrated in the picture here given.



WELL SINKING APPARATUS.

It consists simply of putting a saw on a large gas pipe and connecting to the upper end a water swivel that forces water into the pipe.

The disastrous results so often attendant upon an electric discharge have been dwelt upon since time immemorial; but the peculiarly interesting, though usually harmless effects, produced by lightning in loose sand, are rarely alluded to.



FULGURITE TUBES.

The fulgurites shown in the cut are from material received from Union Grove, Ill., and now in the collections of the national museum. These are described in detail in Popular Science Monthly, from which description it appears that these materials represent one of the most extensive finds of fulgurites yet noted in this country.

The plate shows the characteristic forms. Fig. 1 represents a portion of tube of common form. Fig. 2 is peculiarly striking with its bulb-like enlargement. Fig. 3 represents a cross-section of tube of characteristic form.

The results of a comparatively recent analysis of both the fulgurite glass and the sand in which it was formed make it appear that the glass was not pure quartz glass, although it showed itself to be richer in silica than the sand from which it originated.

Influence of Electricity on Roots. Numbered with other interesting experiments conducted by Professor Hoffmeister, of Germany, are those showing the influence of electricity on the growth of roots.

No Purely Left Handed Race. Dr. Louis Jobert states in a recent publication that no purely left handed race has ever been discovered, although 70 per cent of the inhabitants of the Punjab use the left hand by preference, as do also the largest part of the Hottentots and Bushmen of South Africa.

Advertisement for St. Jacobs Oil, German Remedy for Pain, featuring an illustration of a man carrying a large fish.

Advertisement for Red Star Cough Cure, featuring a red star logo and text describing its safety and effectiveness.

Advertisement for the First National Bank of Ottawa, listing capital, directors, and services.

Advertisement for the National City Bank of Ottawa, listing directors, services, and exchange rates.

Advertisement for Professional Cards, listing various attorneys and their offices.

Advertisement for Physicians, listing names and addresses of medical professionals in Ottawa.

Advertisement for G. B. Stockdale, a pharmacist and chemist, listing his products and services.

Advertisement for Russell & Son Furniture, featuring an illustration of a large, ornate furniture set.

Advertisement for M. Kneussl's Drug Store, listing various medicines and chemicals.

Advertisement for Santa Claus Soap, featuring an illustration of Santa Claus and a woman.

Advertisement for A Man, featuring a map of the United States and text describing a service or product.

Advertisement for Chicago, Rock Island & Pacific R.R., featuring a map of the rail line and text describing its routes and services.

Advertisement for The Famous Albert Lea Route, featuring text describing the route between Chicago and Minneapolis.