

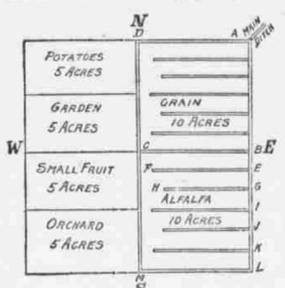
FARM AND GARDEN

PRACTICAL IRRIGATION.

A Plan For a Forty Acre Farm—The Location of Laterals.

Irrigation has become a live question in every part of the country, and many are on the lookout for practical information on its various points.

It may be impossible to properly locate the main laterals at first, and supplemental laterals and dikes may have to be constructed.



PLAN OF FARM SHOWING LATERALS.

Laterals must be fitted in and the ground leveled. Theoretically they should be given such a grade as will result in a moderate velocity for the water, but not sufficient to wash the earth along the sides and bottom of the ditch.

One irrigator of considerable experience recommends that field laterals should have a fall of at least ten feet per mile. The laterals should be located nearly at right angles with the direction of the greatest slope of the land, so that the water will flow from rather than along them.

If the surface of the ground is somewhat uneven, the problem of locating the permanent laterals becomes correspondingly more difficult, often rendering the use of the engineer's level necessary.

The inexperienced irrigator often considers that the ground occupied by the laterals is waste land because it bears no crop. Accordingly he makes them far apart, so that the water must flow a long distance to cover the surface between any two.

It will usually pay to do some work in smoothing off the little irregularities in the surface of the farm. This may be done with a plank scraper or drag after the ground has been plowed.

Theoretically the surface of the ground should be a plane surface, with just slope enough to allow the water when delivered at the highest point to flow in a thin, uniform sheet.

We will assume that the farm is planted to such crops as are ordinarily found in the arid region, say ten acres of alfalfa, ten acres of grain, five acres of potatoes, five acres of garden, five acres of small fruits and five acres of orchard, as shown on the plan of the farm.

If it be assumed that there is a fall of four feet across the farm from north to south and two feet from east to west, the water can be made to flow either west or south from any point.



PLANK SCRAPER.

Such an arrangement permits the water to flow away from rather than along the laterals. The main ditch divides at A, as shown in the diagram; one branch runs south to L, while a second runs west to D, the middle of the north line of the farm, where it turns and flows south to M.

Alfalfa is irrigated by the method known as flooding, which may be described as follows: Nearly parallel ditches, BC, EF, etc., are made 100 to 150 feet apart through the field.

PROFITABLE PASTURES.

English Farmers Get Good Returns From Every Square Inch of Land.

One of the surprising things in farming is the gradual development of land to a point where it will yield returns never dreamed of by the early cultivators, says American Cultivator.

So it is these English farmers make a profit from land worth ten times as much in money valuation as the pasture fields of this country.

SEED CORN.

Butts, Middles or Tips—A Pointer For Corn Growers.

According to the Ohio experiments, there is no practical difference in the yield from either butts, middles or tips of ears of corn and no difference in the number of barren stalks.

A contributor to Wallace's Farmer says: "Of course not. Why should there be? But if they had mixed butts, tips and middles together and planted them they would have had a better yield."

This is valuable information to every corn grower. The longer the period of pollination the more perfect are the results. The tip kernels give the earlier and the butt the later, and the why is made manifest of a larger yield by planting the kernels from the whole ear mixed together.

Honey Bearing Trees. The American linden, or basswood, as some call it, is a first class honey bearing tree, says Farm, Field and Fireside.

It is something of the nature of the maple or the sugar bush, but is perhaps much harder than either. It grows to an immense size, makes the most beautiful shade tree and is very valuable for its timber owing to the whiteness and fineness of the grain of the wood.

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A LASTING EFFECT.

This Evidence Should Prove Every Claim.

Relief from the pains and aches of a bad back is always welcome to every backache sufferer, but to cure a lame, weak or aching back is what's wanted.

Mr. H. P. Smith, blacksmith, of Elm street, Amesbury, Mass., says: "Mrs. Smith, from a cold which settled in her loins, suffered so severely from backache that she was unable to attend to the ordinary household duties, often finding it impossible to even make a bed for three months."

Doan's Kidney Pills for sale by all dealers; price 50 cents a box. Mailed on receipt of price by Foster-Milburn Co., Buffalo, N. Y., sole agents for the U. S.

St. J. & L. C. R. R. Time Table.

Table with columns for Stations, Trains, and Times. Includes routes to Swanton, Shelton, Fairfield, Cambridge, Johnson, Hyde Park, Morrisville, Winooski, Hartwick, Greenboro, and St. Johnsbury.

RUTLAND RAILROAD.

Table with columns for Stations, Trains, and Times. Includes routes to Burlington, Rutland, and various intermediate stations.

NOTICE.

We hereby certify it to be our intention to close that portion of the highway leading through Smuggler's Notch, which lies between the barways of the barn on the John Harris farm and Cambridge line, from the 20th day of November, 1902 to the 20th day of May, 1903.

Advertisement for C.S. Page's 'A Paying Business for You' featuring a portrait of a man and text about agents wanted for selling skins and pelts.

A Note of Warning.

I would warn you to choose your companions carefully. If they are those who do not choose to acknowledge God and their Saviour in their pleasures, avoid them, for danger lurks ahead.

Christ's Embassadors.

We need greater love to God and more love for each other. Our love must overleap the bounds of Christian energy all gone? Headsache? Stomach out of order? Simply a case of torpid liver. Burdock Blood Bitters will make a new man or woman of you.

THE PUZZLER

No. 186.—Triangle. 1. To move at a moderate gallop. 2. Loudly. 3. Middle of the day. 4. A large tank; a measure for liquids of four hog-heads. 5. One-half of edge. 6. A letter.

No. 187.—Illustrated Central Acrostic.



Each of the ten small pictures from St. Nicholas may be described by a single word. When placed in the order numbered, the central letters will spell the surname of a very celebrated American.

No. 188.—Patriotic Enigma. In baffle, but not in subdue; In sorrow and also in woe; In bluster, but not in command; With your friend, not with your foe; Teetotalers and tipplers both use me; In whisky I'm now almost lost; In courtroom, but never in jail.

No. 189.—Diagonal. Crosswords: 1. A multitude. 2. Engaged in warfare. 3. Generous. 4. At no time. 5. One of the mechanical powers. 6. With flow of utterance. 7. Ludicrous imitation for sport.

No. 190.—Novel Puzzle. Write the words, when rightly guessed, one below another in the form of a certain letter, and the initials and initials will name what brings happiness in June to many school children.

No. 191.—Riddlemeecree. My first is in sew, but not in cut; Second in kite, but not in string; Third in yard, but not in but; Fourth in run, but not in fling; Fifth in our and also in boat; Sixth is in cat, but not in dog; Seventh in skin, but not in float; Eighth is in tree, but not in log; Ninth is in cricket, but not in frog. If you would answer this little rhyme, Think of the Fourth and be in time.

No. 192.—Musical Instruments. 1. Part of the ear. 2. Part of the body, as the heart or the lungs, etc. 3. Part of a stag. 4. A drinking vessel made of horn.

How to Get Left. The man who never stops to think Through haste is oft bereft. The man who stops to think too long Stands round till he gets left. —Washington Star.

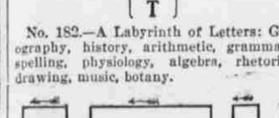
Supply Equal to Demand. Visitor—What is the maximum temperature here? Hotel Proprietor—I can't say exactly, but it's as maximum as it is anywhere!

Key to the Puzzler. No. 176.—Flower Puzzle: Heliotrope. No. 177.—Charade: Will, helm, inn, a. Wilhelm-in-a. No. 178.—Changed Words: Late, least. Rope, power. Sark, shark. Table, stable. Cares, caress. No. 179.—Couplets: 1. Ewing. 2. Kipling. No. 180.—Diamond: 1. L. 2. Rap. 3. Rate. 4. Lateral. 5. Perry. 6. Lay. 7. L. No. 181.—A Double Metaphasm:

PIR G OWN

No. 182.—A Labyrinth of Letters: Geography, history, arithmetic, grammar, spelling, physiology, algebra, rhetoric, drawing, music, botany.

No. 183.—Hollow Squares: 1.—1. Pear. 2. Rare. 3. East. 4. Trip. 11.—1. Post. 2. Tree. 3. Ever. 4. Road. 111.—1. Hit. 2. Task. 3. Kite. 4. Ench. No. 184.—Riddlemeecree: Faults. No. 185.—Hidden Animals: 1. Hen. 2. Ram, seal. 3. Rat. 4. Panther. 5. Jackal. 6. Stag. 7. Leopard. 8. Cat.



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Advertisement for Castoria, 'The Kind You Have Always Bought', featuring the signature of Charles H. Fletcher and 'BEARS THE SIGNATURE OF'.

Advertisement for Dairy and Creamery Sweepstakes won by Improved U. S. Separator, listing winners like Mrs. Carrie J. Nelson and G. I. Wilcox.

Advertisement for The People's National Family Newspaper, published Monday, Wednesday, and Friday, with subscription rates.

Advertisement for McCall's 50c Magazine Year and Ladies' Magazine, featuring a portrait of R. J. Payne.

Advertisement for 'HOW to make Hens lay an Abundance of Eggs and how to preserve them until you can obtain the Highest Prices' by R. J. Payne.