

FARM ENGINEER LISTS HOMEBUILDING PLANS

SELECT PROPER SITE FOR HOUSE

Health Is First Essential In Selection of Building Ground

PURE WATER SUPPLY

Convenience And Economy of Labor Is Second Essential

(This is the second of a series of articles on farm engineering.)

(By Elmo G. Harris)

We will assume that the ability to win our bread is reasonably assured. After this the chief pursuit is happiness, and, except perhaps in the subject of marriage, nothing controls our happiness more than does the home and its surroundings.

It is not the intent to enter the subject of the architecture nor interior fittings of the home but there is this very important first step, the selection of the site, which we will discuss. A mistake in this is irremediable and may be a source of mortification and regret for a lifetime. Yes for many lifetimes—for other generations must live there.

To keep within the scope of this discussion we must further limit the discussion to the case where a definite piece of land is in the possession of the one who is going to build a home and on this land he must select the site.

The writer on this subject is met at the outset by the difficulty that every case presents different problems—or the similar parts of the general study bear different weights in different cases—or the problems that call for most study in one case may not be present at all in others. The controlling feature in one case may be a spring, in another the juncture of two highways, in another the only convenient high spot. Sometimes the best site can be seen without question; in others a fairly complete map may be required showing contours, fences, fields, streams, roads, present buildings, present orchard, etc.

Where one is contemplating building a home (with all the word ought to mean) it will be money well spent to hire a surveyor (or an engineer) make a map, and then lay out the grounds according to the map, all with the approval of the owner of course. The relative heights of different parts of a piece of ground are sometimes very deceiving even to an experienced engineer and much more so to an untrained man.

On the chart the reader will notice that convenience and economy of labor comes next after health and before the subject of scenery. This should surely be so in studying a farm home though it might not in case of a country home where little farming will be done.

It may seem unnecessary, and should be, but nevertheless the prospective builder is cautioned against letting some temporary structure, brush, gully or the like prejudice him against what may be his best building site. Real estate men know that an old neglected place can be sold easier if the old building, fences, etc., are removed. Ladies are more liable to these weaknesses than men. Knowing this it may be advisable to clear away all these things before selecting the site.

CHART

Subjects to consider when selecting a site for a home taken in order of importance:

A. Health:

1. Pure water supply.
2. Effective drainage.
3. Pure air—Secure prevailing sum-

mer breeze if possible.

B. Convenience and Economy of Labor:

1. Not at greater elevation than necessary.
2. Water flowing to house by gravity.
3. Make basement accessible without steps if possible—both residence and barn.
4. Make barn easily reached from farm, home and highway.
5. Water for barnyard.
6. Sewage delivered on garden or field.
7. Garden and orchard convenient to home.
8. Prevent barnyard fertilizer washing away.
9. Irrigate garden.

C. Scenery as Apparent From the House:

1. See as much of the farm as possible from the house. Select moderately elevated site.
2. See as much other scenery as convenient.
3. Include river, lake or highway.
4. Avoid groves in front.

D. Pleasing Appearance Seen From Outside:

Same as C except that grove in front may be attractive from highway.

CHAPTER II

Concrete About the Country Home

In accordance with the purpose announced in the preface, the discussion under this caption must be of things with which the home builder may not be familiar or that he may overlook.

Bear in mind the object: to get satisfactory, lasting results for least cost. Otherwise as is often stated "to make a dollar do the most good."

With this intent where everything bearing on the problem is properly weighed we will find that the quality of lasting, endurance or permanency is of prime importance. Try to get such materials in such places, and so put in that it will not need to be done over for a lifetime, nor leave regrets for a lifetime.

If every subject in this book were as well covered in other literature as is this, this book would not have been written. At this date, 1929, the reader can get for the asking excellent matter copiously illustrated in Bulletins published by the U. S. Department of Agriculture, Washington, D. C., or from the large cement companies. Nothing could be better, but this book could not be made large enough to include such quantities of details and illustrations.

Dwellers in the country can be most sincerely congratulated that the use of hydraulic cement concrete is becoming so common outside the cities. Its merit is such that its use will surely increase, but let us urge, teach, and preach its use by everyone. Its advantages for many purposes (when properly mixed and placed) cannot be successfully disputed either from the point of view of effectiveness or of economy.

Some of its many advantages are: it is everlasting, rat and mouse proof, bug proof, fungus proof, water proof (when properly done), fire proof; can be built in any shape, can be made and placed by the ordinary farm laborer, (and thereby save us from the exactions of labor unions) and materials (except cement) can usually be supplied from within the farm.

Materials for Concrete

Where it can be gotten, a sandy gravel is the cheapest and an altogether satisfactory material for concrete such as required about a farm. In many localities a farmer may have access to a gravel bar on a river or a gravel bank in the hills deposited in some mysterious way. The best mixture is from one-fourth to one-third sand, but if it is one-half sand it will not be worthwhile to screen it. For the present purpose we may define sand as all that will get through

CAN YOU ANSWER THE QUESTIONS?

How Many Scrub Sires and Offspring Are We Feeding?

AND HOW MANY RATS?

How Many Bugs Do We Fatten On Our Crops?

Please, if you can, answer the following and give your reasons for your answers:

How many scrub sires and their offspring are we feeding—and losing money on?

Just how many thousand tons of rich soil is weathering off our farms every year?

Just how many bushels of corn are we feeding to rats every year?

Just how many thousands of miles do we and our families walk to the spring or well and back every year?

Just how many tons of beef and grass that wastes every year would grow and does not for lack of fencing?

Just how many bugs we fatten on our crops every year?

Just what could we get for the wasted animal products caused by intestinal parasites every year?

How many thousand tons of sand do we buy every year because we do not use high grade fertilizers?

Just how much labor and fertilizer are wasted every year because of using poor seed?

Just how many hundred cows it would take than we now have to give our total population one quart of milk a day each?

Just how many more hens would it take to give our population two eggs per day each?

Just how many tons of shipped-in hay do we feed every year?

Just how few sheep and how many dogs are we feeding?

Just how soon, if numerous people do not raise some work stock, will we be paying extra fancy prices for our work stock?

Just why is it that a majority of our farm homes have no lawn or flower gardens?

Just why and for how long will so many farmers go slouchy and unshaven and feel keenly embarrassed when they meet well groomed men?

Just why will we cuss high taxes and waste so much valuable time, land and other material when a little headwork would turn it into a profit?

Just why do we think we can grow clean, pure pork when we let our hogs live in filth?

Just from a humane standpoint this always has seemed funny. Yet there is more profit in hogs on free range, fed properly, than those kept in close confinement.

Just why nine out of ten farmers will work fifteen hours a day with their muscles and let their minds loaf on the job?

Just why so many of us keep loafing cows and hogs and chickens the year round and if we hire a man to help us and he is only one-half hour too late getting to work one day we raise Cain?

a sieve with quarter inch mesh. The coarser the sand the better within the above limit. When natural gravel cannot be gotten the builders must use sand and broken stone. The broken stone should never be larger than two inches in the largest dimension and the finer the better so long as it is not reduced to sand.

It is economy to put some large unbroken stones in the body of the concrete while placing it,—these are called "plumbs" and the only limit to the size and number is that each concrete and not lie nearer than shall be completely surrounded with two inches to the outside face. These

(Continued on page four)

CONTROL OF TOBACCO FLEA BEETLE NEEDED

Just About the Farm

What would living be like and what a little thing taxes would seem; what beautiful homes we would have; what high prices would our land sell for—if there should happen to be any for sale—; what a paradise for summer visitors; what a Mecca for culture and refinement; what a paradise for summer camps and summer universities; what ideal surroundings in which to raise a family of sturdy and well balanced men and women, if:—

Macon county produced all the pork that she consumes.

Macon county grew all the flour she consumes.

Macon county grew all the feed that she consumes.

Macon county grew all the vegetables that the cannery could can for nine months in the year.

Macon county had every foot of land in pastures that could be profitably put into pastures.

Macon county grew all the oats it takes to balance a poultry ration.

Macon county grew all the oats it would take to balance the feed fed to dairy cattle.

Macon county grew as much wool as the people of Macon county now wear.

Macon county grew all the hogs that could be grown.

Macon county had the million dollars that she has fed to rats, animal parasites and diseases these last twelve months.

Macon county had the million dollars that her farmers are allowing to leach out of the soil every year.

Macon county saved every year the million hours that her farmers waste in carrying water to the house and to the stock to pay their taxes with.

Macon county had dairy cows of such quality that it would be looked upon as a sorry cow that did not give three hundred pounds of butter fat per year.

Macon county had hens that would lay no less than two hundred eggs each per year.

Macon county had a good brood mare for every head of work stock that is now being used in the county.

Macon county's tripe hounds were sheep.

Macon county's average farm, and all the rest in proportion, had 200 corking good hens, two purebred sows, five cracking good cows; ten jam up ewes—and all purebred.

Macon county's produce went out under grades and registered trade marks.

Yearling Hens

Yearling hens are better than pullets for breeders, as the former usually lay large eggs which hatch into larger and stronger chicks than those of pullets.

The percentage of protein contained in a commercial concentrate is one good measure of its value, since most farm-grown feeds have an excess of fat and carbohydrates and a shortage of protein.

Take the farm horse to the "dentist" for examination at least once a year. Usually the long, sharp corn-

BRANNON GIVES TRAP BED PLAN

Excellent Results May Be Obtained Through This Method

FLEAS ARE POISONED

"One-In-Six" Mixture Controls Beetle With Fine Results

(By C. H. Brannon, Extension Entomologist)

North Carolina tobacco growers are well acquainted with the damage caused by the tobacco flea-beetle, (or flea "bug"). The damage to tobacco by the flea-beetle is enormous, amounting to many thousands of dollars each year. Therefore, tobacco growers should study carefully the method of control.

The adult tobacco flea-beetle is only about one-fifteenth of an inch in length and usually escapes notice until present in very destructive numbers.

Tobacco growers should make every effort to control the flea-beetle in the tobacco beds, if this is done, later injury in the field will be lighter. We cannot emphasize too strongly the importance of control in the plant bed. Later in the field they are difficult to control.

Control in the Plant Bed

The trap bed has given excellent results in the control of the flea-beetle. Boards should be used around the margin of the bed to support the cheese cloth. (Poles should not be used as they cannot be made tight.) Soil should be banked around the boards so that insects cannot crawl under them. The boards should be fitted closely at the corners. Only new cheese cloth should be used over the bed. Obtain cheese cloth having 25 strands to the inch. The cheese cloth should be well sewn and fastened to the margin boards by wooden strips. Tacking or nailing the cloth to the boards without the strip will usually result in holes pulled in the cloth. An area of several feet around the tight bed should be sown in tobacco as the trap. Use poles for the margin of the trap and loosely cover it with old cheese cloth. This loosely covered bed around the outside of the tight bed is the trap. The plants in the trap should be kept well covered with poison (number of applications depending on rains, etc.) As a poison use the "one-in-six" mixture, which is: 1 pound of Paris green with 5 pounds of Arsenate of lead. Use at the rate of 1-2 pound per 100 square yards as a dust. Cover the plants well. Important: The "one-in-six" mixture has been found to control the flea-beetle better than any other mixture. Do not substitute calcium arsenate or any other material for Paris green and arsenate of lead.

If flea-beetles show up in a large number in the field, poison as follows: For newly set plants use 3 pounds per acre of the "one-in-six" mixture.

For field control on tobacco half grown or larger, use 4 to 6 pounds per acre of the "one-in-six" mixture. This will control horn worms, also.

Horses' teeth need occasional filing by a veterinarian. Roughness causes sore tongues or cheeks, and poor mastication which is followed by digestive troubles. Older horses especially need attention.

Ringworm of cattle is common during winter and spring and should be treated if found. Scrape off the (Continued on page four)