

will, if moist, produce timber of inferior quality and less durability.

The beech requires a strong mineral soil fresh and rich in humus. Its true home is on lime, basalt and green-stone, if the soil is not too thin. It is often found with the oak on sandy-loamy deposits, if not too dry or too moist, but on poorer and lighter soils or in exposed places it grows but slowly. Its wood is usually worth less than other hard woods in the market.

The oak depends less on the kind of soil than on its quality, the amount of humus, and above all, of moisture contained in it. The best growth occurs in a deep somewhat loamy sand, or sandy loam, but it thrives well on loam or sand. Although it prefers moisture, it will not grow in marshes unless drained. In forests the oak attains greater dimensions when grown with other oaks alone; for it thrives best with the crown free, the stem sheltered and in shade, and the foot under covering. The oak also thrives well when mingled with the beech, provided the situation is not exposed or the soil shallow.

The ash and elm have much in common, are found on similar soils, and may be classed together as regards their treatment. The true home of the ash is on rich, loose, strong mineral soils, abounding in humus and even in binding ones, if fertile. Dry, poor soils are not suitable, and it requires a moist soil. The ash must have plenty of light, hence does not thrive so well in pure forests. It does well in beech forests, and may be grown with oak, maple, hazle, sycamore, elm, etc., with good results. In a word, these mixed forests yield in most cases a larger revenue than either of the varieties alone.

The maple delights in fresh, strong mineral soils, such as lime and basalt—in short, such as the beech, but do not bear so much moisture as the ash or elm. The sycamore makes greater claims on the soil in mineral strength and moisture than the maple.

In general, the effect which the soil and subsoil have on the quality of timber may be expressed scientifically as follows: The combustible tissues of timber, or those liable to decay by exposure to atmospheric or other agencies, are carbon, oxygen, hydrogen, and nitrogen. The absolutely necessary constituents of the ashes, or portions not liable to decay, are iron, potassium, sodium, etc., etc. It follows, then, that according as the percentage of combustible tissue exceeds that of the incombustible, the timber will be less durable, and for technical purposes, of less value. Therefore, soils and subsoils in which there is a fair amount of lime, potassium, silica, etc., in a word, those rich in alkalis, produce timber of the best quality; while such as contain an abundance of moisture yield timber neither of such durability nor of so high value.

SIMPLE DIARY AND ACCOUNT.

In the farmer's life there seems less need of book-keeping than in most other callings. His sales are comparatively few, and his purchases of such large articles as are well remembered by their importance, or he deals with men who keep books and he trusts them. Yet if he keeps no record he will be often perplexed to know where and for what the money went, that he received for grain, beef, wool or butter. It would also be a satisfaction for him to know each year whether his work was as well advanced as at a similar date in previous years, or whether his barns at mid-winter, or at any date, had as much fodder for stock as at a similar date in past winters.

I have kept a daily record of work and a careful account in income and expenses the past twenty-five years. I have used books of various sizes and with different methods, but like my present

way best. I have a blank book about 7 x 12 inches, and with 286 pages. On each page are thirty-seven lines below the headlines. As the book is open I use the right-hand page for a daily record of work and use one line a day, so after dating thirty lines for a month's calendar I have six or seven lines for general memoranda. I find one line will contain several items, and give room for a word about the weather or figures representing temperature. The left-hand page is for accounts, and during the past two years I find every month that the one page is room enough to give every sale and every purchase, even when I retail vegetables and buy groceries in small quantities.

As we open the book we have the history of a month before us. The pages are ruled so that two columns of dollars and cents can be placed on the right of the page, so that it is just as well to fill the page with transactions as they occur, and place the money in its proper column as received or paid out. Some credits may not have the amounts carried out. The month's accounts may in this way be ready to add up and balance, and if the income and outgo is not alike, it tells the reason why. It is best to write this book with good ink. It may be well to have other books to note the work, fertilizers, seed and harvest of any or every field. Such note-book and pencil may be in daily use, but for the main thing I like my present way best.

WHAT IS THE CONDITION OF YOUR CELLAR!

Is it damp, close, and filled with the disagreeable odours of decaying vegetables? If so, it is time you gave the matter your earnest attention, for you have in that locality the germs of disease, and yourself and family are liable to be prostrated at any moment. You think your cellar or basement is in good sanitary condition. Do you know that it is? Have you carefully examined the premises? Have you looked over the vegetables to ascertain their condition? We know that many serious illnesses have their origin in cellars, both in city and country, and we can do our readers no greater service than to urge them to see that at all times they are in a dry, sweet, wholesome condition. Why should farmers' families, living in the country, away from the pestilential vapours of cities, be so subject to attacks of malignant diseases?

There is a reason for it, and we can point it out. They arise from indifference to the observance of hygienic rules, and violation of sanitary law. Cleanliness is essential to health, and is as necessary in the country as in the city. A family living over a foul cellar is more liable to become poisoned and afflicted with illness than a city family living in a polluted atmosphere, but without a cellar or basement filled with fermenting roots and fruits. There is far more sickness in the country than there ought to be. With plenty of pure air, water, and exercise, disease ought to be kept at bay, and would be, if a better observance of certain hygienic conditions were maintained. Bad-conditioned cellars, small, close sleeping rooms, stoves—these are all agents of evil, and are fast making the homes of farmers almost as unhealthy as those of the dwellers in cities. Are not these suggestions worthy of consideration?—*Minneapolis Tribune.*

TIME AND TEMPER SAVED.

If there are any old logs or chunks lying around in the fields that are to be planted this spring, it will be profitable to remove them at once, entirely out of the field, before ploughing and planting, instead of leaving them as too many do until the ploughing is being done, and then be all

the time bothered by stopping the team to turn them out of the way as the ploughman passes around with each furrow which frets the team and driver, often, too, breaking the plough or harness and is a waste of time; so with brush and dead branches which fall from old dry trees, in the field; they cause more loss of time and waste of grain than is required to remove them entirely before the ploughing and harrowing is begun.

So with old stumps and stones; if they are too large or heavy to haul away, dig a hole by the side of them and tumble them in, cover them below the furrow depth; it will be good economy in the end.

The land will be all the better, for many yards all around, as it will be well drained, warm and dry; and all crops—grain or grass—will be found to grow more luxuriantly in such spots than in other places. Besides, better still, the temper will not be disturbed, nor the farmer riled up.

DEEP PLOUGHING THE BEST.

No process will more surely preserve the productive power of the land than deep, fine ploughing, and no other mode will do it at less expense. Bringing up new soil from below and mixing it with the upper worn soil, by thorough harrowing or rolling, is about equal to renewed soil. Then the sub-soil plough, loosening the earth to a liberal depth—say twelve to fifteen inches—allows the roots of plants to run down and spread out more than shallow soil, for nourishment and moisture; this also restores worn land.

Besides, land made mellow to this depth is not half so liable to suffer the injuries of drouth, as the moisture can rise from below in a dry time—hence plants will not feel or suffer the effects of drouth, as in shallow soil. Further, land will not suffer half so badly from excess of water and heavy rains, as the surplus water can more readily run off.

WHITEWASH EVERY YEAR.

No person who regards the health of his family should neglect to whitewash every spring. Country places, especially farm out houses, fences, etc., are generally improved in appearance by an annual coat, and it will add to their permanency more than one would imagine. It is cheap and easily applied, so that neither expense nor labour can be pleaded against it. To be durable, whitewash should be prepared in the following manner: Take the very best stone lime and slack it in a close tub, cover with a cloth to preserve the steam. Salt—as much as can be dissolved in the water used for slacking and reducing the lime—should be applied, and the whole mass carefully strained. A few pounds of wheat flour mixed as a paste may be added, and will give greater durability to the mass, especially when applied to the exterior surface of the buildings. With pure lime properly slacked and mixed almost any color may be made by the addition of pigments. Granite, slate, free-stone and other shades may be imitated, and without any detriment to the durability of the wash.—*Florida Dispatch.*

The quantity of food needed by stock varies even amongst animals of the same breed, and it necessarily varies to a greater extent among animals of different breeds. Upon this subject a farmer in England says it is sufficiently correct to reckon on a sheep consuming twenty-eight pounds of green food, an ox or cow one hundred and fifty pounds, a calf forty pounds, and a yearling eighty pounds daily. At this rate one ox or cow consumes as much as five sheep. The latter will require 10,220 pounds, or nearly five tons apiece, the former 54,750 pounds, or nearly twenty-five tons of green food, for its yearly maintenance.