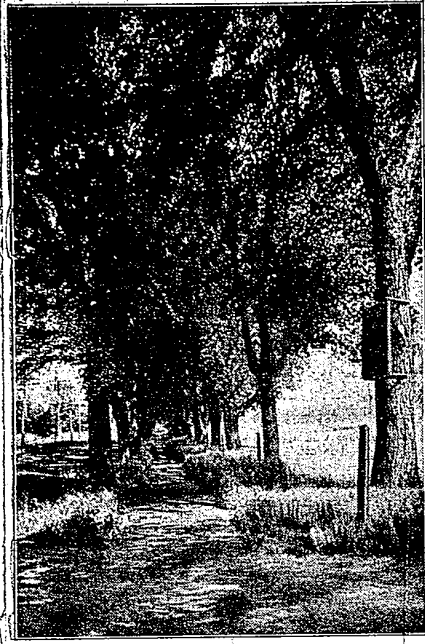


# THE AMERICAN ELM

By R. J. BALDWIN, Michigan Agricultural College



"Elm Rows" at Michigan Agricultural College—Trees Planted 40 Feet Apart in Alternating Rows.

The white elm is native over practically all of the eastern half of the United States, and wherever it grows it is a general favorite among American people. Its abundance along country roads and city streets shows that it is easily obtainable and easily grown. But its favoritism is probably due chiefly to its appearance. The far-reaching plume and vase like growth of the elm, spreading its limbs out thirty or forty feet on either side, and mature trees makes it not only an impressive and agreeable sight but also makes it a particularly desirable tree for shade.

The elm is a great lover of damp low lands, but adapts itself readily to other conditions and is often found growing vigorous on uplands. Even though the elm desires an abundance of water it is capable of resting long

periods of drought without the loss of leaves or twigs.

Elms are propagated from seeds which ripen early in the spring and germinate and grow the first season. Two-year-old seedlings can be transplanted but are usually left until four or five years old. Such seedlings if grown under cultivation on rich soil are much better for planting than those taken from the woods where they had less chance to develop.

Small elms are very apt to spring up in protected corners along fences, ditch banks, road sides or among stumps and stones. While young they are scraggy and poor looking and are often cleared away as objectionable brush. Such seedling elms if given a fair chance make rapid growth and soon become a source of beauty, pleasure and comfort to all eyes, to man and beast.

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## RAPE FOR LATE SUMMER AND AUTUMN PLANTING

The use of the rape plant on American farms is not as common as other crops which have been grown for a longer period and are better known. In the early stages of its growth its leaves resemble, and can scarcely be distinguished from the rutabaga, but as development proceeds the energies of the plant are directed for the production of stems and a profusion of leaves rather than for the production of a large bulbous root as in the case of the rutabaga. The tender stems and leaves of this plant furnish excellent pasturage for sheep and swine during the latter part of the season when grass pastures are dry and scant.

Rape may be introduced in a number of places in planning the farm crop system; it seldom occupies a place in a rotation of cereals and hay crops. Rape may be sown along with oats but it is safest to broadcast and harrow after the oats are up for fear of the rape making too much growth before harvest, thus interfering with harvesting, curing and threshing. This crop can also be grown along with corn by broadcasting just previous to the last cultivation.

Rape makes a good cover for the growing gardens, where permanent sod conditions are not desired. This combination is ideal for both sheep and swine. It can also be grown on fields or portions of fields where earlier corn cereal crops have failed from a variety of causes. Sods not well suited to grain production, such as well drained muck, will produce good crops of rape.

This crop is adapted to a variety of soils though the best results are secured from the more substantial loams. It is a gross feeder and responds quickly to fertilizers. Improvised sands and extremely heavy clays are not well suited to rape production.

The earlier spring plantings are more productive, as growth continues until so severely pastured the first time. Seedlings may be made up late as August 1, but success later in the season is dependent on heavy rainfall to start the crop quickly.

The lands should be prepared as for cereal crops in early spring, but as the season progresses more attention must be given to thorough pulveriza-

## Three Bad Weeds in the Hay Crop

Of the great variety of weeds found in our meadows there are three particularly bad ones, viz: narrow-leaved dock (*Rumex crispus*), red root or pleasanthed (*Achillea millefolium*), and tulle six (*Galatium rivale*).

The reason why these are bad weeds is because their seeds ripen by the time the hay is cut. The seeds of these plants are clinging to the land along with the litter and manure, and thus may be spread to new areas. Unless they are so prevalent as to render the task absolutely impossible these weeds should be pulled not later than June 15. Address the experiment station at East Lansing for bulletins Nos. 256 and 267 on "Michigan Weeds" showing pictures of both plants and seeds.

If you will thoroughly dissolve one ounce of arsenate of lead in one gallon of water and spray your cucumber plants with it, at the time that they first come up, and repeat in a week or two, if necessary, the yellow striped cucumber beetle will not hurt them very much.

Crops of weeds killed before planting by harrowing frequently, cuts in along the labor required to care for the corn and bean fields.

Birds of a feather pay better than scrubs.

# PROPAGATION OF THE ROSE NOT VERY DIFFICULT TASK

Many Growers Start Flowers on Their Own Roots, but the Majority Prefer the Budded Plant—No Garden is Complete Without Them and Should Be Grown Abundantly.

(By H. ERICHSSEN)

Nothing can be said in praise of the rose that has not been said before. Universally recognized as the most beautiful flower, it is the one child of Flora around which a wealth of sentimental history and poetry clusters. The maidens of ancient Greece and Rome adorned themselves with chaplets and garlands of roses, as does the maiden of today, and then as now the rose was regarded as the emblem of beauty and true worth, fit to crown a queen. No wonder, then, that it is so highly esteemed that even the orchid, so often regarded as its rival, will never supersede it in popular estimation.

Of late the beauty of the rose has been so widely appreciated that the popularity it now enjoys and the demand for hardy garden roses are annually increasing. No garden is complete without roses and every family ought to grow them in abundance, for never have roses been so cheap and beautiful as now. Moreover, the cultivation of the flower is so simple that no excuse can be offered for its neglect.

The first requisite for success in rose growing is the selection of good healthy plants. Weak, sickly roses are dear at any price. Many of these plants lack vigor because they are stunted by remaining too long in the cutting-bed or in small pots, before they are set out. In order to obtain the best results, therefore, it is advisable to restrict one's patronage to first-class nurseries only, firms that

to argue for their own method of propagation. But of late years many eminent rosarians have pronounced themselves in favor of budded plants. A prominent firm of rose-growers at Rochester, N. Y., that is known in the world over for the excellence of its roses, concretely expressed this conviction as follows:

We find many varieties of roses grown on this stock (Hansa) adapt themselves to a greater range of climate and soil, bloom more profusely, endure better the heat of the summer and make far stronger plants than if grown from their own roots. Many object to budded roses on account of the suckers they sometimes throw out; but if proper attention is paid to the planting, this will rarely be an annoyance. Budded roses should be planted sufficiently deep, so that the junction of the bud with the stock is from two to three inches below the surface of the earth. If grafted this precaution is withheld about half an inch to start from the base, the growth and foliage of the stock are so distinct that it is readily recognized by the most inexperienced amateur and is easily removed.

Another authority on this subject goes even further and contends that many fine varieties of the queenly flower are utterly worthless unless their own roots, which his own experience coincides with that referred to above. Moreover, I found that it is possible, as a rule, to replace budded roses more cheaply than those grown on their own roots, which is another point in their favor, particularly in localities where many roses are liable to be winter-killed.

Roses may be grown to perfection in ordinary garden soil provided they are planted in a sunny, sheltered location, away from the roots of large trees, for these will absorb all the life-sustaining nutrition of the soil, whereas as young trees and dwarf shrubbery do no harm. If the soil is naturally poor, however, it is advisable to lay a substantial foundation for future good results, by substituting a quantity of manure and fertilizer, in the following proportions:

To each wheelbarrow load of loam— which, by the way, may be readily obtained under the sod of the field or by the roadside—add one-third of its bulk of well-rotted stable manure and some sand, if that constituent should be lacking.

This conglomeration should be thoroughly mixed by being applied to a depth of a foot, and is then ready for the reception of her majesty, Queen Rosa, as she was termed by Dean Hole, the man who had roses in his heart as well as in his garden. Rose roots penetrate deeply when they have a chance, but it should be remembered that they will not thrive in stagnant soil, hence good drainage is essential.

The question naturally presents itself as to which is the best time to plant roses, but the broad extent of our country precludes a definite reply of general application. However, mid-spring should receive the preference and it is better to be a little too early than too late.



For Cut Flowers Nothing Can rival the Beauty of the Rose.

are prepared to furnish strong, well-rooted plants, such as will make a showing the first season and develop into vigorous specimens.

In selecting roses for the garden, it is well to know that these plants are their own roots or budded low on the Manetti, a briar-rose that has largely superseded the Dog-rose and other stocks in this country.

Experts are divided on the question as to which should receive the preference, and the beginner is liable to be in a quandary because growers are apt

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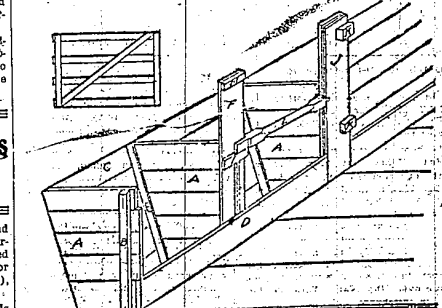
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## DEVICE KEEPS A STALL CLEAN



The main feature of the fastener here represented is the bar I which is intended to prevent the cow from crowding forward so that the droppings fall on the platform. This device is to be modified to suit individual cases.

A A are the divisions between the mangers, the bottom being 16 inches long and the top 30 inches.

B is a strip I by 4 inches, 3 feet long, one to be nailed on each side of the partition A, as shown in the drawing.

C is the side of the manger next to the feeding alley.

D is a 10-inch board separating the manger from the standing floor.

E is a 1 by 3 inch strip in corner of manger.

F is a 1 by 3 inch board, 4 feet long, with a slot 3 feet long by 1 inch wide in lower end, to allow it to slip over partition A, between strip E and board D, and should be secured by nailed to B and D.

H and I are 1 by 2 inch strips, 3 inches long, between F and J. The upper edge of I should be 31 or 32 inches from the standing floor.

J is a 1 by 8 inch board, 4 feet long, nailed on D and bolted through H and I to F. This leaves a slot one inch wide between J and bar L to play in freely on H.

K K are blocks securely fastened to J to hang awing partitions to the upper one should be 2 1/2 inches thick and the lower one 1 1/2 inches.

L is a bar 2 by 3 inches extending across the stall with a tenon 4 inches long on each end, to work loosely in the slot between the boards F and J. When standing at the head of the stall his head over the bar L. When eating she puts her head under the bar. If she wishes to raise her head while eating she can do so, as the bar will raise to strip H.

For partitions between the cows use 1 by 4 inch strips 5 feet long, and braces of the same material. These partitions are hung by ordinary hinges the blocks K K which will hinge the blocks to the sides will serve both ways. At the outer provide chains with a snap on one end, and of proper length to reach from one partition to the next. These chains hold the partitions in place and keep the cows in the stall.

# "Every Day Is Bake Day at Our House!"

writes an accomplished housewife, an enthusiastic patron of

## DR. PRICE'S Cream BAKING POWDER

"It is Hot Biscuit, Muffins, Sally Lunn, Waffles, Pot Pie, and almost daily, now that the season has come, a Fruit Short Cake—all home-made, home-baked of course, and perfectly delicious! Home-baking, thus, with the aid of Dr. Price's Baking Powder, provides the most tasty food, which I know to be of absolute purity, clean and healthful, and with considerable economy."

Our correspondent has written for us the whole story.

## DR. PRICE'S CREAM BAKING POWDER

Makes Home-Baking a Success and a Recreation,

with food more healthful, desirable, and safe from all improper contamination.

PRICE BAKING POWDER CO., CHICAGO

## MORE HOSPITALS ARE NEEDED

Situation Improved, but Further Work is Needed to Stamp Out Tuberculosis.

Only four states, Mississippi, Nevada, Utah and Wyoming, have no beds whatever in special hospitals or wards for consumptives. Eight years ago when the National Association for the Study and Prevention of Tuberculosis was organized, there were 28 states in which no hospital or sanatorium provision for consumptives existed, and the entire number of beds in the United States was only 10,000.

"While these figures would indicate a remarkable growth in anti-tuberculosis activity," says Dr. Livingston Farrand, executive secretary of the National association, in commenting on the subject, "there are still practically ten indigent consumptives for every one of the 30,000 beds, including those for pay patients, in other words, we have from 250,000 to 300,000 consumptives in this country too poor to provide hospital care for themselves. If tuberculosis is ever going to be stamped out in the United States, more hospital provision for these foci of infection must be provided."

## Springs in Their Brains.

Two Frenchmen, in visiting an art gallery, stopped to admire a painting by an American. The artist happened to be in the gallery and in broken English one of the Frenchmen asked: "How did monster ever catch such a wonderful picture?"

"O," replied the artist, with a far-away look, "that painting was an off-spring of my brain."

The other Frenchman was greatly interested and asked his friend what that American had said.

"I can hardly explain," whispered the first Frenchman excitedly; "he said he pictures was one spring out of his brain. Does not any wonder that Americans act queerly when they have springs on their brains?"

## The manufacturer of artificial feet is responsible for many a false step.

Red Cross Blue Ball, all blue, best bluing value in the whole world, makes the laundry smile.

One always thinks there is a lot of money to be made in any kind of business that he isn't in.

When in need of a good laxative give Gardol Tea, a trial and be convinced of its merit. It is made entirely from pure herbs.

Standard of Sanity. Shakespeare was asked if Hamlet was sane. "As sane as the Fourth of July," he replied.

## Two Indispensable Supports.

Of all the dispositions and habits that "let" us to political prosperity, religion and morality are indispensable supports.—George Washington.

## Same Purpose Accomplished.

"Oh, George!" exclaimed a fond mother, when she saw her small boy considerably battered up and dirty. "you have been fighting again? How often have I told you that you shouldn't fight?"

"Well," said he, "what are you going to do when a fellow hits you?"

"Why, keep out of his way," said the mother.

"If he," said the youngster, "he'll keep out of mine after this."

## Helped a Little.

At Dinard one summer there was a beautiful young countess, the wife of a millionaire, whose bathing dress was—well—

A couple of men about town were talking in shocked tones about the countess' bathing dress on the casino terrace.

"It's shocking; it's most improper," said the first.

"But," said the second, "I can't be there if any worse than the dinner dress she wore at Mrs. Hughes-Hallett's last night."

"Oh, well," said the other, "she had her diamonds on then."—Rochester Freeman Telegram.

If there ever is a time when you are justified in cursing. It is when the summer weather sets your appetite to fusing; But there isn't any need to sink your soul and shock the neighbors. Tempt your appetite with Toasties and go singing to your labors.

Written by W. J. MURPHY, Toledo, Ohio.

One of the 50 Toasties for which the Postum Co., Battle Creek, Mich., paid \$100,000 in May.