Whenever You Use Your Back

Does a Sharp Pain Hit You?

It's a sign of sick kidneys, especially if the kidney action is disordered, too, passages scanty or too frequent or off-color.

Do not neglect any little kidney ill for the slight troubles run into dropsy, gravel, stone or Bright's disease.

Use Doan's Kidney Pills. This good remedy cures bad kidneys.

A TYPICAL CASE—

W. M. Richardson, Warren, Indiana, says: "For ten years I couldn't work. My legs swelled, I had lumbago and my kidneys failed me. The rheumatic pains were terrible. Doan's Kidney Pills were a life saver to me. They cured everyone of my troubles after other medicines failed. I have been well since."

Get Doan's at any Drug Store, 50c. a Box

Doan's Kidney Pills

DR. J. D. KELLOGG'S

ASTHMA

Remedy for the prompt relief of Asthma and Hay Fever. Ask your druggist for it. Write for FREE SAMPLE NORTHROP & LYMAN CO., LTD., BUFFALO, N.Y.

Helpmates and soulmates are not always synonymous.

Your working power depends upon your health. Garfield Tea helps toward keeping it.

Her Special Advantages.

James Fullerton Muirhead in his book, "The Land of Contrasts," tells of an American girl who was patronizingly praised by an Englishman for the purity of her English and who replied: "Well, I had special advantages, inasmuch as an English missionary was stationed near our tribe."

To keep artificial teeth and bridgework antiseptically clean and free from odors and disease germs, Paxtine Antiseptic is unequaled. At druggists, 25c a box or sent postpaid on receipt of price by The Paxton Toilet Co., Boston, Mass.

Modern Miracle.

"Do you believe in miracles?" asked Dobkins.

"You bet I do," said Snobkins. "Why, only the other day my wife bought me a box of cigars, and by George, Dobky, I could smoke 'em."—Harper's Weekly.

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 believe it's any worse than the dinner dress she wore at Mrs. Hughes-Hallet's ball last night.

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

NOW THEY'RE ENEMIES.

Miss Uglimug—I always have to stand up in a crowded street car.

Miss Pert—Why don't you wear a veil and fool 'em?

GOOD NIGHT'S SLEEP

No Medicine So Beneficial to Brain and Nerves.

Lying awake nights makes it hard to keep awake and do things in day time. To take "tonics and stimulants" under such circumstances is like setting the house on fire to see if you can put it out.

The right kind of food promotes refreshing sleep at night and a wide awake individual during the day.

A lady changed from her old way of eating Grape-Nuts, and says:

"For about three years I had been a great sufferer from indigestion. After trying several kinds of medicine, the doctor would ask me to drop off potatoes, then meat, and so on, but in a few days that craving, gnawing feeling would start up, and I would vomit everything I ate and drank.

"When I started on Grape-Nuts, vomiting stopped, and the bloated feeling which was so distressing disappeared entirely.

"My mother was very much bothered with diarrhoea before commencing the Grape-Nuts, because her stomach was so weak she could not digest her food. Since using Grape-Nuts food she is well, and says she don't think she could do without it.

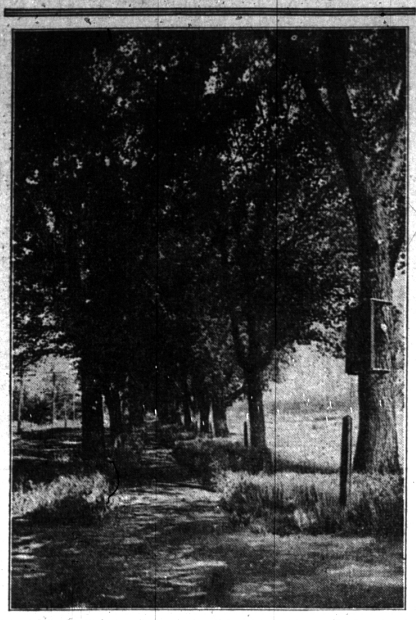
"It is a great brain restorer and nerve builder, for I can sleep as sound and undisturbed after a supper of Grape-Nuts as in the old days when I could not realize what they meant by a 'bad stomach.' There is no medicine so beneficial to nerves and brain as a good night's sleep, such as you can enjoy after eating Grape-Nuts." Name given by Postum Co., Battle Creek, Mich.

Look in pkgs. for the famous little book, "The Road to Wellville."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

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 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, in 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 resisting 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 scraggly 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 comers, both man and beast.

RAPE FOR LATE SUMMER AND AUTUMN PLANTING

By R. S. SHAW,
Dean of Agriculture,
Michigan Agricultural College

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 used 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 bearing orchards 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 sown cereal crops have failed from a variety of causes. Soils 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. Impoverished sands and extremely heavy clays are not well suited to rape production.

The earlier spring plantings are more productive, as growth continues unless too severely pastured the first time. Seedings may be made as 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 pulverization and packing of the soil particles with the aid of the roller to provide conditions favoring speedy germination.

The seed may be sown broadcast in which case from five to six pounds per acre is necessary. If grown in drills from twenty-four to thirty inches apart only from one-half to two-thirds this amount of seed will be needed per acre. The seed is possessed of great vitality and will grow without fail if placed under the proper conditions. Dwarf Essex is the best variety to grow, and in fact is the only one in common use in this country for forage purposes.

Being a watery feed, growing animals should not be required to subsist on rape alone as it will not do much more than provide sustenance for maintenance.

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 pigeon weed (lithospermum arvense), and false flax (camelina sativa).

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 returned 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. 260 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 half the labor required to care for the corn and bean fields.

Birds of a feather pay better than scrubs.

An Aid to Lice.

Filth of all kinds causes lice. The mites will breed in the droppings. Rotten nest eggs are good sources. The heat from the body of the hen hatches them by thousands. Every crack and crevice contains them. Look on the birds to find the large body lice, as they never leave the fowls. Rub a little melted lard on the head and neck of the birds, and dust the bodies well with insect powder. There is, however, no use in wasting time doctoring the birds unless the premises are thoroughly cleaned and kept clean and sanitary.

How Pests Kill Poultry.

An opossum eats the head and neck of a fowl, and kills only one or two at a time. A mink bleeds his victims in the neck and sucks the blood, and will slaughter a dozen or more birds in a night. Both leave the carcasses in the coop or house.

Hiccoughing in Pigs.

Hiccoughing in pigs is caused by a derangement of the stomach. One of the best ways to correct the trouble is to change the ration, feeding less corn and more of such feed as ground oats and bran.

COWS AND CLOVER MAINTAIN QUALITY OF SOIL FERTILITY

Raising Abundant Crops of Legumes for Farm Stock and Selling Butter Should Enrich Any Farm—Sowing Orchard Grass and Clover Together Makes Good Pasture.

What should be a strong inducement to every owner of a farm with cows to make and sell butter is the fact that this form of dairying makes it possible not only to maintain the soil fertility, but to constantly add to it.

While the solids in the milk contain the most essential elements of fertility, the butter fat contains no element of fertility at all. Hence, the selling of milk in large quantities inevitably reduces the productiveness of the farm, unless a large proportion of the feed for the cows is bought off the farms, instead of being grown on it.

On the other hand, butter contains practically nothing that constitutes an element of fertility in the soil, says a writer in Farm Progress. For this reason, if one has a poor farm, and wants to adopt a line of farming that will soonest and most economically make it productive, the best plan will be to keep cows, and sell the cream or butter. And the more feed one buys, and the less he takes off his own place, except clover, the sooner the soil may be made rich.

Having had considerable experience with clover, cowpeas, Canada peas and other legumes, I have concluded that for soil improvement the red clover or alsike, will be found the best thing for the purpose. I would only use alsike in case the land to be improved was rather moist, as on that sort of soil it will usually make a better growth than common red or any other, except white clover, and that does not make a sufficiently bulky growth to serve the purpose best.

In some experience of my own, I have found that sowing orchard grass and clover together makes a most excellent pasture; and, if one keeps the stock off, it is possible to get a growth that will make a fine mixture for hay; but when clover is cut at the right time and properly cured, there is no more nutritious forage that can be grown.

As I have found that even work stock can be kept in good condition on well-cured hay, if allowed to eat a full ration at each meal, I have about concluded that on the great majority of farms a large portion of the grain fed to work stock may be eliminated if plenty of good, bright clover hay is fed to all stock, and sufficient time allowed for the horses to eat it. This may seem to be a sort of heresy to the vast number of men all through the big corn states, who feed little grain, except corn, and some of them no roughage part of the year except corn fodder. But I know whereof I speak; some of the best teams that I have ever seen are never fed anything except clover hay, unless by chance that runs low, and it is necessary to feed timothy hay; and, when that is done, a feed of corn is given along with it.

It always seems to me very remarkable that so few men use clover as the principal feed for their stock, when there is such inducement to do so. I have never known of a case where any one was not pleased with the results in feeding clover hay to work horses, if he had good, bright hay and gave a reasonable grain ration in the shape of corn with it.

Where the chief grain fed is oats, the clover is not suitable, because the percentage of starchy matter or its equivalent would not be properly proportioned to the proteids. As I know men who have for years not fed an ounce of grain to horses doing farm work daily, and they have kept in fine condition, and at steady work on nothing but nice, clean, bright, well-cured clover hay, it seems to me that a great many men are wasting money in their method of feeding, and are failing to improve their soil because they do not sow the clover.

Probably the latter is the more important point to be considered. Common sense and clover are mighty good factors in successful farming.

A Profitable Bunch of Youngsters.

EXCELLENT FEEDS TO FATTEN LAMBS

Use of Alfalfa for Roughage Simplifies Question Considerably—Peas are Recommended.

(By J. R. McNULTY, Colorado Agricultural College.)

The great question which the successful lamb feeder is now trying to solve is that of the most economical concentrate to be used in fattening his lambs.

The fact that most feeders are using alfalfa for a roughage simplifies the above problem considerably. Alfalfa supplies the protein, and when fed with a fattening concentrate, as corn or barley, reduces the amount of feed required for a pound gain to the minimum. Experiments prove that corn is just a trifle better, pound for pound, than barley when both are fed in connection with one of the legume hays, as clover or alfalfa. There is little data on the economy of feeding corn alone with upland or timothy hay or with corn stover. This follows from the fact that such a ration would lack considerably in protein. Doubtless barley would somewhat excel corn, pound for pound, when fed with roughages lacking protein, as the ones last named. Whole barley may be fed very successfully to fattening sheep

The fact that cotton seed meal can be purchased for a price comparing favorably with that of corn in Colorado has suggested the feeding of this concentrate with alfalfa hay for fattening lambs. In this combination, however, we have two feeds high in protein and consequently an unbalanced ration. Oil meal is fed quite extensively with timothy hay and roots, in which combination it gives very good results. On the other hand, very few records of sheep fattened on cottonseed meal and alfalfa are available, for, as a rule, protein rich feeds (alfalfa and oil meal) are the most expensive nutrients of a ration and are not usually combined. It is very probable, however, that some cottonseed meal can be fed when alfalfa is fed, if we use a mixed ration of corn and cottonseed meal. The best proportion would perhaps be one-third cottonseed meal and two-thirds corn, either shelled or cracked. This combination should give good results and at the same time be much less conducive to digestive disorders than a ration of cottonseed meal and alfalfa.

Peas are strongly recommended for fattening sheep. When fed in combination with either corn, barley or oats, equal parts, better gains are made than when either of the above cereals is fed alone. This is especially true where timothy hay or corn stover is fed as a roughage.

Hog Pasture.

Purdue university, Lafayette, Ind., has published a circular on Supplementary Pasture Crops, referring especially to supplying continuous pasture for hogs. It shows clearly the value of the different crops commonly used, tells approximate time of sowing, time of pasturing, number of hogs per acre, etc. It may no doubt be had for the asking.

Cement Wallow for Hogs.

A cement tank, if sunk into the ground and filled with water, is just what pigs need during the hot days. If the yard immediately surrounding the tank is made of gravel so that the water may drain away there will be no unsightly mudhole.

USE OF GYPSUM OR LAND PLASTER

Practice Nearly Always Increases Yield of Clovers and Peas—How to Apply it.

Plaster nearly always increases the growth of the clovers and peas. Mixed with an equal quantity of wood ash, it is largely used by gardeners and truckers to stimulate the growth of early potatoes, corn, beans and cabbage.

Plaster is a sulphate of lime, and both the sulphuric acid and the lime are active principals in plant growth. The time to sow plaster on clover and oats and peas is when the plants are making their first leaves. Sow at the rate of two bushels to the acre.

On land that has been recently limed the application of plaster has little effect. The only way to find out the value of plaster is to measure off an acre of clover or an acre of grass and clover pasture and sow, say, two bushels to the acre, leaving the adjoining acre unplastered. The growth of the plastered clover will prove its value in a few weeks after the plaster has been sown. When plaster can be had for $10 per ton it will pay to sow it at the rate of two bushels to the acre on dry upland meadows and clover fields, on pastures, oats and peas and on all the bean family. It is also valuable for sowing on clover stubble after the first crop has been cut for hay. The dressing of plaster at this time will greatly encourage the second growth clover. On most every farm there are a variety of soils, and a fertilizer that will prove of value for one kind of soil and crop will prove of little value used on an adjoining field, but having an entirely different character of soil. Test each field and keep a record of these tests, as they will prove valuable.

Preparing Soil.

It is just as necessary to have the soil in a state of high fertility for tree planting as it is for corn planting.

Singing and the Lungs.

It is well known that singing, like whistling, is a fine exercise for the lungs, and some doctors advise those who fear consumption to go in for singing for this reason.

At the same time, they, of course, do not advance the claim that singing alone will save anyone from or cure consumption. Acquire the habit of taking the big deep breath, which is a primary requisite of any kind of singing, bad or good, and the physical joy derived from it will never allow you to relapse into lazy breathing.

SKIN ERUPTION ON CHEEK

Kingsley, Mich.—"Last May my thirteen-months-old baby had a sore come on her cheek. It started in four or five small pimples and in two or three hours' time spread to the size of a silver dollar. It spread to her eye. Then water would run from the pimples and wherever that touched it caused more sores until nearly all one cheek and up her nostrils were one solid sore. She was very fretful. She certainly was a terrible looking child, and nothing seemed to be of any use.

"Then I got some Cuticura Soap and Cuticura Ointment. She tried to rub off everything we put on so that we would sit and hold her hands for two hours at a time, trying to give the medicine a chance to help her, but after I washed it with Cuticura Soap and then put on the Cuticura Ointment they seemed to soothe her and she did not try to rub them off. It was only a few days before her face was all healed up, and there has been no return of the trouble since. We thought that baby's face would surely be scarred, but it is not." (Signed) Mrs. W. J. Cleland, Jan. 5, 1912.

Cuticura Soap and Ointment sold throughout the world. Sample of each free, with 32-p. Skin Book. Address post-card "Cuticura, Dept. L, Boston."

Blessed Sympathy.

Sympathy with animals blesses and humanizes men and women. To get into real relations with an animal is a liberal education. It is something to be really interested even in a plant and to observe the working of life to any sphere not our own. How much more when that life is directing a personality which consciously looks up to us and will love us if we will let it!—Christian Register.

Cheerful Outlook.

"Father, dear," said Amaranth, "Willie Smithers is going to call at your office this morning to ask you for my hand. Isn't there some little hint I can give him before he goes so as to make it easier for him?"

"Yes," said Mr. Blinks, "tell him to take ether before he comes. It will save him much pain."—Harper's Weekly.

Important to Mothers

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it

Bears the Signature of *Chas. H. Fletcher*

In Use For Over 30 Years.

Children Cry for Fletcher's Castoria

Strictly Up to Date.

Alice—How oddly some men propose.

Kate—I should say so. A gentleman asked me last week if I felt favorably disposed to a unification of interests.

Red Cross Ball Blue will wash double as many clothes as any other blue. Don't put your money into any other.

Stern Call of Duty.

Reform is not joyous, but grievous; no single man can reform himself without stern suffering and stern working; how much less can a nation of men!—Carlyle.

Stop the Pain.

The hurt of a burn or a cut stops when Cole's Carbolasalve is applied. It heals quickly and prevents scars. 25c and 50c by druggists. For free sample write to J. W. Cole & Co., Black River Falls, Wis.

Well Defended.

He whose study is among the shadows and lights of nature has an unsuspected coat of mail defending him among all the turmoil.—Mrs. Oliphant.

Important It is that the blood be kept pure. Garfield Tea is big enough for the job.

If a woman can find the style of hat she wants, she can always adjust her head to fit it.

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, 25c a bottle.

He who hesitates is lost—especially when he is found out.

JOHN'S FRIENDS WERE LOYAL

Young Bride Got Early Proof of the Way Men Will Stick by One Another.

The bridegroom of three months bade his wife adieu one morning and started on a business trip to a town 25 miles distant. The journey was to be made by automobile and he promised to return in time for seven o'clock dinner as usual.

But no husband appeared when dinner was served and the anxious wife watched the hands of the clock as they journeyed on and announced that the hour was midnight, and still the husband failed to appear. The frantic wife sent telegrams to six friends of the groom living in the town where he might have gone, asking if he was spending the night with them. As dawn appeared a farm wagon drove up containing a farmer and the missing husband and furnishing motor power for a broken down automobile that trailed behind. Almost simultaneously came a messenger boy with an answer to one of the telegrams, followed at intervals by five others and all of the telegrams said:

"Yes, John is spending the night with me."

In loyalty what surpasses man?

Why be constipated when you can get Garfield Tea at any drug store? It will quickly relieve and its benefits will be realized.

The way some women talk is enough to make a bachelor feel bald headed.

SANDWICHES! What's tastier than Libby's Potted Ham

It's exceptional in flavor, and doesn't cost a bit more than ordinary kinds.

At All Grocers

Libby, McNeill & Libby

Chicago

Whittemore's Shoe Polishes

Finest Quality — Largest Variety

"GILT EDGE," the only ladies' dressing that positively contains Oil... Blacks and Polishes ladies' and children's boots and shoes, gloves without rubbing. 25c. "French Gloss," 10c.

"STAR" combination for dressing and polishing all kinds of russet or tan shoes, 10c. "Lady" russet, 25c.

"QUICK WHITE" (in liquid form with sponge) quickly cleans and whitens dirty canvas shoes, 10c and 25c.

"ALBO" cleans and whitens canvas shoes. In round white cake packed in zinc, 6c boxes, with sponge, 10c. In handsome large aluminum boxes, with sponge, 25c.

If your dealer does not keep the kind you want send us the price in stamps for a full size package, charges paid.

WHITTEMORE BROS. & CO.
20-26 Albany St., Cambridge, Mass.

The Oldest and Larger Manufacturers of Shoe Polishes in the World

Ask for this Box

HIRES HOUSEHOLD EXTRACT

It's the goodness of this root-beer as well as its tonic properties that makes it so great a favorite.

One package makes 5 gallons. If your grocer isn't supplied, we will mail you a package on receipt of 25c. Please give his name.

Write for prize recipe book.

THE CHARLES E. HIRES CO.
255 N. Broad St., Philadelphia, Pa.

W. N. U., DETROIT, NO. 28-1912.

The Old Oaken Bucket filled to the brim with cold, clear purity—no such water nowadays. Bring back the old days with a glass of

Coca-Cola

It makes one think of everything that's pure and wholesome and delightful. Bright, sparkling, teeming with palate joy—it's your soda fountain old oaken bucket.

Whenever you see an Arrow think of Coca-Cola.

Free Our new booklet, telling of Coca-Cola. Vindication at Chattanooga, for the asking.

Demand the Genuine as made by THE COCA-COLA CO. ATLANTA, GA. 52-J

YOU DON'T COOK WITH THE NAME

We like the cook's test best, but the guarantee of reliability, flavor and purity that goes with the name

HENKEL'S FLOUR

means a lot to any housewife.

Note HENKEL'S BREAD FLOUR, HENKEL'S COMMERCIAL and HENKEL'S VELVET PASTRY FLOUR have years of good reputation back of them.