

PERM AND GARDEN

To Make Poor Farm Rich.

The progressive farmer rotates his crops. He tile-drains his land. He keeps dairy cows or mutton sheep or both. He breeds draft horses and does farm work with brood mares and growing colts. He improves the power of the soil by growing legumes.

James Wilson, secretary of agriculture, in the above words sums up the vital principles of good farming. He declares that the people of the United States have wasted their inheritance of land and wood, and the productivity of the soil near the great centers of population has steadily decreased. We have been a nation of soil robbers, but there is at last an awakening—slow but sure.

Farmers of all sections are wanting to know how to stop the leaks and increase the deposits of their business and the government is helping them in many ways. There are over 9,000 persons employed in the Department of Agriculture and 2,000 of these are scientists, all working intelligently toward helping the farmer solve the problems which confront him. There are sixty-five land grant colleges with 10,000 students in agriculture. These boys are learning that rotation of crops is necessary, that live stock must be raised to make manure, of which there is never enough.

They are finding out that young grasses and legumes are nature's perfect ration for domestic animals. Milk and meat and work are had more cheaply from the pasture than from other sources. Pasture land increases as farm help becomes scarce. Mutton sheep are suggested when labor is dear. Cultivated crops reduce organic matter in the soil and render it unfit for profitable growing. Pasturing replaces organic matter. When good crops of grain or roots are wanted the pasture, plowed and reduced in season, is the best place to get them. Western farmers in the corn belt get their heavy crops from pasture land.

With the help of improved machinery the progressive individual farmer is producing much more than the average farmer did a generation ago and men of this class are keeping up the productive qualities of their farms.

The neglected lands of the eastern and middle states can be brought back to their primitive fruitfulness through the aid of scientific farming. Secretary Wilson says they are the cheapest land in the country and people wanting homes who have saved a little capital from their earnings or young men of means and tastes for the independent life of the country will find rich opportunities in these lands for profit and usefulness.

Removing Saplings and Stumps.

In uprooting young trees a team of horses or even a single horse with a chain can do effective work. Best results can be obtained where the growth consists of saplings two to four inches in diameter and where the root system is lateral. The plan is to fasten one end of the chain to the trunk as high above the ground as the flexibility of



STUMP WITH LATERAL ROOTS.



UPROOTING A SAPLING.

the tree will permit. While the horses are pulling at the tree a man should sever the roots at the base. Stumps of moderate size may also be pulled with chains and horses. One end of the chain should be fastened around a large root as shown in the illustration. By placing the chain across the top of the stump a leverage can be secured to take full advantage of the strength of the horses.

Believes in Mixed Farming.

I firmly believe in mixed farming, but even then we must specialize on some certain line of stock feeding and rotation of crops if we make a decided success of the business. Call it general farming, but let's not call it mixed farming. As grandfather used to say, "Be something. If you cannot be a long-tailed rat, be a mouse." Have some hobby, some kind of a crop or some kind of live stock and specialize on that and make your other farming subservient to that one special crop or kind of live stock feeding. We have too many common mixed farmers. John O. Barnes, Indiana.

Fence Post Expense.

An annual fence post bill of more than \$1,250,000 is one item in the expense account of the farmers of a single agricultural State. It is estimated that the farmers of Iowa use posts having a value exceeding this enormous sum each year to maintain the fences on the 25,000,000 acres of improved land in the State.

In making these estimates, H. P. Baker, professor of forestry in Iowa State Agricultural College, figured that the farms of Iowa required 78,000,000 posts for fences, or 2,000 to the square mile. Placing the value of the posts at 15 cents each, the cost of renewals every eight or nine years, which is the life of the post, is \$11,718,000, making an annual bill for renewals of \$1,465,000.

Like many other farming States, Iowa has a lack of fence post material, but there is little excuse for this condition, according to the foresters who have made studies in the State. A properly managed forest plantation will produce, when the trees have reached post size, 3,500 posts three to five inches in diameter per acre; thus, it would take 22,350 acres about every ten years to grow the necessary posts to supply the State. Iowa is said to have 200,000 acres of planted timber, and yet the fence post supply is insufficient. If properly cared for, many of these plantations can be made to produce more timber, and thus insure the future post supply.

These 200,000 acres are not at present furnishing the posts which it is estimated can actually be grown on 22,350 acres of properly handled forest land.

Effects of Rural Delivery.

There is a veritable network of rural routes out of nearly all of the towns in this section of the State, and seldom does one find a farmer who is not placed in a position to take advantage of one. With present conditions existing, the man on the farm has the opportunity to take his daily paper as the one in town, and gets his mail somewhat earlier than many of the residents of the cities. There are rural mail carriers and rural mail carriers—each one has his striking characteristic. The majority are favorites in their particular field, and as a rule the patrons of his route would not trade him for any other man on another. The carrier and the farmer learn to know each other, and the country visitor on hearing them greet each other would say they were both "good fellows." The man that carries the mail should have a whole lot of credit. He is obliged to make the trip in all kinds of weather and the best of protections will not make the job an enjoyable one. Some time when he is not busy, let the reader talk a few minutes to a rural mail carrier and he will find that he is in touch with everyone on the route.—Bloomington (Ill.) Pantagraph.

Cattle Have Rabies.

Following the attack of a mad dog on his stock, Louis Klein, a farmer near Prairietown, has had to kill three head of cattle and four hogs which had become infected with rabies. The members of the family noticed that the dog acted peculiarly, but did not suspect that it was mad until too late. After the dog had bitten the stock it was killed by Klein, who feared that it would attack the members of his family.—St. Louis Globe-Democrat.

Fighting the Potato Scab.

Potato scab is a fungus growth. It may be in the soil or it may be in the seed. Plant seed that is free from scab on soil where no scabby potatoes have been grown for years. A preventive is to soak the seed in a solution of corrosive sublimate and water, two ounces of the corrosive sublimate to fifty gallons of water. Soak the seed one and one-half hours. Do not leave scabby potatoes lying on the ground or put them in the cellar.

Salt Purification.

Salt is purified by melting in the new and rapid English process. The crude rock salt is fed automatically to a table contained in a large furnace, is then fused and runs into troughs, from which it is drawn at one side of the furnace into large cauldrons. Air is forced into the molten mass and lime is added. The impurities sink to the bottom, and the upper portion is ground and screened while the lower part is used for chemical manure.

Grind the Corn for the Horses.

Corn and oats should be ground together for horses. Many good horsemen never feed whole corn. Some horses cannot digest it properly, but when it is ground with oats the mixture makes one of the best rations for a work team, especially when doing heavy work. Nearly all the large transportation companies in the cities never feed whole corn.

A Separator for Eight Cows.

A correspondent asked if it would pay to buy a separator for a herd of eight cows.

Yes, by all means. It will not only pay for itself every year in the amount of cream saved, but the milk is better when fed warm from the separator to the young animals. The man who does not use a cream separator is suffering a large loss every month.

Murder Over a Line Fence.

In a quarrel over a line fence near Broken Bow, Neb., Stewart Lanterman killed H. E. Hoffman and his son George, by cracking their skulls with a neckyoke. It is possible that more murders have been committed over line fence disputes than over any other trouble that arises between farmers.

JUDGE PETER S. GROSSCUP.

Jurist Who Reversed \$29,240,000 Standard Oil Fine.

Since rendering the decision reversing the fine of \$29,240,000 imposed upon the Standard Oil Company by Judge Landis, Judge Peter S. Grosscup of the United States Circuit Court of Appeals has received many intimidating letters, some threatening to kill him and others to blow up his house with dynamite. The letters have been sent to Chicago from all over the country, some of them unsigned and others bearing evidently fictitious names.

Judge Grosscup was appointed to the bench—the District Court of the United States—during President Harrison's administration. It was for disobedience of an injunction issued by him that Eugene Debs, head of the American Railway Union, was sent to jail for contempt, during the great railroad strike, thereby becoming a political martyr. The judge is a native of Ashland, Ohio. His ancestors settled in



JUDGE PETER S. GROSSCUP.

Berks County, Pennsylvania, 150 years or so ago, and were prominent men, holding positions in the colonial government before the Revolution, and later in the State government. Judge Grosscup's grandfather moved to Ohio early last century. The judge was educated in the common schools and Wittenberg College at Springfield, Ohio. He studied law in Boston, and began practice in Ashland in 1874, in partnership with the late Judge William Osborne. He was interested in politics, and once ran for Congress as a Republican, but was defeated. In 1883 he moved to Chicago and entered into partnership with Leonard Smith, one of the most distinguished lawyers in the West. Judge Grosscup soon won recognition at the Chicago bar, and succeeded Judge Blodgett in the United States District Court. Later he became judge of the United States Circuit Court of Appeals.

Visit from the Inspector.

A woman out west tells how her husband, Silas, got appointed postmaster, says a writer in Lippincott's. "There was four candidates—three men and a woman. One was an undertaker and the woman was a milliner, and the only way they could settle it was by having a postoffice inspector come along and decide it.

"He came and the undertaker showed him his hearse, along with other qualifications which he thought entitled him to the postoffice. The woman and her friends showed the inspector how clean the milliner shop was kept and showed him the artificial flowers and artificial birds, trying to outdo the undertaker. The other candidate was keeping a drug store and sold 'nips' to poor and weary pilgrims traveling from afar at 10 cents a nip, and while the inspector took a dead-end nip, he said the law made it impossible to dispense drinks and mail out of the same room, so this left only Silas to buck the undertaker and the milliner. Whatever he 'done' I never knew, but Silas made a sign at the inspector and I see him acknowledge it and so I begins to smell woolen, and it wasn't long until the inspector got around to where Silas was handing out the mail, for he was deputy, as they call it, to handle the postoffice, until the new postmaster was appointed. Mr. Inspector says, says he, 'Young fellow, you don't run a burial cart nor milliner store, nor you don't mix drinks, but if you can raise a bond, why you can have the office.'

Irrelevancies.

Put a sign "Fresh paint" on your door and every one will test it to see if it is really so. Hang out a sign of "Wisdom, gravity and profound conceit" on your face and half the world will take it for true without question. These are the days when even the modest little girl in the world looks forward.

The amount of wealth one has is usually in inverse proportion to his capacity to enjoy it. High finance is thus termed because it is so expensive to those on the outside.

Made a Change.

"Poor man! Have you always been blind?"

"No, mum," answered Tired Tiffins, unthinkingly. "Last week I wuz lame, but dere wuzn't enuf in it."

How He Liked 'Em.

Miss Gushley—I like people who are always the same, don't you?"

Mr. Lashley—Not if they're uniformly disagreeable.—Smart Set.

PASSENGER-PIGEONS.

From time to time for several years reports have come from New York State, and especially from the Catskill region, that flocks of genuine passenger-pigeons had been seen there. John Burroughs, the naturalist, has followed up and, so far as may be, collated these reports, until it seems probable that in the mountains district northwest of Kingston there actually exists an increasing colony of birds of a species supposed to have become extinct.

In the natural history of America there is no more remarkable story than that of these beautiful birds which formerly frequented the entire central part of the continent in unnumbered numbers. Novelists and story-writers have frequently referred to the old-time "pigeon shoots," and pigeon pie was a favorite dish of our grandfathers and even of our fathers. The birds were lessened in number by the wholesale slaughter for city grocers, in single dealer, says W. B. Shepley in his book on the pigeons, having shipped one hundred and seventy-five thousand live birds to market from a single nesting one spring, besides thousands of barrels of dead birds. This formed but a small part of the catch at that nesting.

Probably no more remarkable account is given by any naturalist than that of Alexander Wilson, the earliest of American ornithologists, who visited in Kentucky a nesting place thirty miles long and several miles wide, in which every tree held from one to one hundred nests, and many trees were broken down and every growing thing was killed by the croaking birds.

"About one o'clock," says Wilson, "the pigeons, which I had observed the greater part of the morning flying northward, began to return in such immense numbers as I never before had witnessed. Coming to an opening by the side of a creek where I had a more uninterrupted view, I was astonished at their appearance. They were flying with great steadiness and capriciously at a height beyond gunshot, several strata deep, and so close together that, could shot have reached them, one discharge could not have failed of bringing down several thousands."

"From right to left as far as the eye could reach, the breadth of this vast procession extended, seeming everywhere equally crowded."

"Curious to determine how long this appearance would continue, I took out my watch to note the time and sat down to observe them. It was then half past one. I sat for more than an hour, but instead of a diminution of this prodigious procession, it seemed rather to increase in both numbers and rapidity; and being anxious to reach Frankfort before night, I rose and went on."

"About four in the afternoon I crossed the Kentucky river at the town of Frankfort, at which time the living torrent above my head seemed as numerous and extensive as ever. Long after this I observed them in large bodies until six o'clock that evening."

"I have taken from the crop of a single wild pigeon a good handful of the kernels of beechnuts, acorns and chestnuts. To form a rough estimate of the daily consumption of one of these immense flocks, let us first attempt to calculate the numbers of that at Frankfort. If we suppose this column to have been a mile in breadth, and I believe it to have been much more, and that it moved at the rate of a mile a minute, for hours, the time it continued passing would make its whole length two hundred and forty miles."

"Again, supposing each square yard of the moving body comprehended three pigeons, the square yards in the whole space multiplied by three would give two billion, two hundred and thirty million, two hundred and seventy-two thousand birds, a number probably far below the actual number."

"Computing each of these to consume half a pint of mast daily, the whole quantity at this rate would equal seventeen million, four hundred and twenty-four thousand bushels of mast a day."

"Heaven has wisely given these birds rapidly of flight and a disposition to range over vast unincultivated tracts. Otherwise they must have perished in the districts where they resided, or devoured up the whole product of agriculture as well as the products of the forests."

A Religious Procession.

"The congregation paid up every cent of my back salary today," announced the village minister.

"How in the world did they happen to do that?" queried his astonished wife.

"I announced from the pulpit," explained the good man, "that unless I got it I would not be able to take the three months' vacation I had planned!"—Chicago News.

On the Centenary.

"Oh, Harold," cried the fair Genevieve, "what has happened? Did you put his foot down when you told him of our love?"

"No, dear one," replied Harold with a painful, reminiscent gasp, "he put it up!"—Baltimore American.

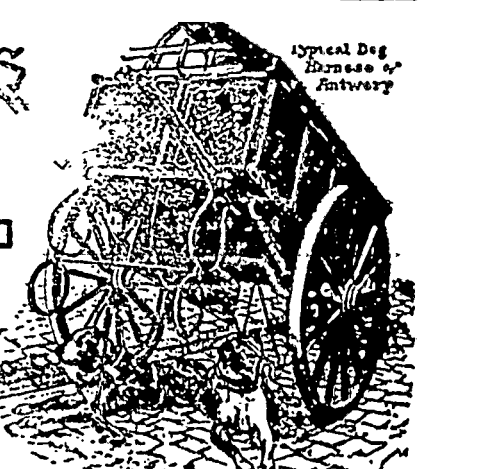
A Fresh Offer.

Customer—What have you got that is strictly fresh?

Greengrocer—One moment, please. Here, Johnny, wait on the lady.—Chicago Daily News.

SLAVE DOGS

By the Law of Europe Countries Dogs are Worked in Harness in Place of Horses



Special Dog Harness of Europe

There are decided contrasts in the treatment of "man's best friend" in European countries. On a recent visit to the continent, writes Samuel Walter in Pennsylvania Gric, one of the first sights that greeted us after landing, was a light vegetable cart drawn by two small working dogs without the slightest assistance from the men who walked beside it. But we found before we had traveled through many European countries that this was only a small portion of the hard work that is required of them. The pet dogs of the United States are considered wonderfully "cute" and smart when they can be trained to draw light carts until tired of the novelty. What would these gentlemen think of a dog that will patiently work all day long, drawing heavy loads in big carts over stony roads obeying every word of their masters, and never offering the slightest objection to the hardest kind of work? What is the way the "working dogs" of Europe are trained?

It seems pitiful to the tourist who is unaccustomed to the sight, to watch the patient, unflinching work of the faithful animals. But the dogs do not seem to mind it. They do not know anything better. Their fathers and mothers before them spent their lives in hard work, and they submit to their lot from their puppyhood, when they trod beside their mothers, and become accustomed to the chains and straps of their future bondage.

These dogs which are known as "working dogs" are of no particular breed, but they are always large and strong looking. They are trained to all kinds of work, and are found in many countries of Europe. In France and Belgium they are usually found in the greatest numbers on the streets, pulling the heavy "push carts," although they are quite as frequently trained to perform certain household tasks, like churning, etc., that can be worked by manliness with the dogs to furnish the power.

In Holland the dogs are not only used to pull the carts and for other street work, but they are also found along the canals pulling the heavy canal boats; just as the strong mules and horses do in this country. Usually there are two big dogs attached to the rope of the canal boat, but I have seen a single dog on the tow path, tugging with all his strength to pull a big boat, with a woman and several children on the boat and the man walking beside the dog, keeping him up to his hard work, but seldom pulling a load. In this country the S. D. C. A.'s would get after such hard-hearted masters.

But I have seen other dogs that really seem to enjoy their work, and their eyes will sparkle and their tails wag with delight at a word of praise from their masters. The dogs that pull the numerous carts through the streets of Belgium and Holland are "geared up" in many curious ways. Some of the carts have shafts like a wagon and are intended for only one dog. When the dog is extra heavy, another single dog or whiffletree is attached at one side, with an extra dog hitched to this.

I have seen a big push cart with several heavy trunks upon it, drawn by a single dog. The master usually walks in front, and taking hold of the shafts guides the cart and holds it in position, but seldom does any of the pulling. While it is done by the big dog fastened underneath with the straps attached to the center of the cart. For the vegetable push carts, which are much the same as those of the United States, the dogs are also geared to the center of the cart, underneath, but back to their master, who holds the handles of the cart and guides and pushes it as they do here; except that they do very little pushing.

Besides the hard work at carting, etc., these faithful creatures also make excellent watch dogs. The owners of the carts can leave their produce, etc., to go into the houses, or wherever they please, while the growling dogs will drive away any one who attempts to approach the cart.

TRANSPORTING A HUGE TREE.

How That Boy Be 700 Years Old

How a Mile and a Quarter

Perhaps the most ambitious attempt at transportation on record has just been made at Frankfort on the Main, Germany, and the results are being eagerly watched by botanists, says the New York Sun. The oldest yew tree in Germany, perhaps in the world, has been removed from the old Botanical garden, which the municipality is about to use for some other purpose, to the new one. The distance traversed was about a mile and a quarter.

The tree was moved not on account of any special scientific value, but for sentimental reasons. Its age is estimated by some authorities at 700 years, and it seemed a sort of sacrilege to cut it down without an effort to save it.

Preparations for the removal were begun three years ago under direction of expert botanists. The principal operation was the clipping off of the tendrils of the roots to a radius of about six feet. This was gradually done, a few at a time, so that the tree might accustom itself to their loss. About the end of last May the colossal task of lifting the tree from its bed and placing it on a huge wagon constructed for the purpose was begun.

A sort of crate was built about the

roots with the earth clinging to them as fast as they were laid bare, the tree being kept erect by guy ropes. When this was finished it was slowly pushed along skids to the wagon, which was located in a trench, so that its floor was about on a level with the bottom of the crate.

The crate was about thirteen feet square and six feet deep. The tree is about sixty feet tall and some of the lower branches had to be pruned to keep them from damaging the roofs of houses along the way. The weight of the tree and its packing was estimated at 90,000 pounds, and to carry it the truck was made of enormous strength.

It was decided that it would be impracticable to put the wagon on wheels, as each one would have to carry a weight of 25,000 pounds, or more than German locomotive wheels are tested for. Besides it was figured that less damage would be done to the road by using rollers of American hickory. In places where sewers or other pipes were underground heavy timber beams were arranged to take the weight of the rollers for fear the conduits would be crushed.

The mechanical part of the transportation was carried out triumphantly. The tree is still propped up in its new location lest the wind should blow it over before it gets a solid hold on the earth. It is watched and watered from day to day. It is not certain yet whether it will accustom itself to its new home, but there are great hopes that it will.

PLAIN TALKS WITH WOMEN.

Life Is to Many Persons a Matter of Sacrifice.

In life a matter of sacrifice, asks Louise Satterthwaite in the Philadelphia Telegraph.

Many very worthy people, having gone through life and endured their share of its trials and misfortunes, attain their minds to the sombre key, and go softly the rest of their days; subdued and depressed, they dare not lift their eyes above the earth level of their sorrows; patient, it is true, but undeniably mournful, they round out the years of their pilgrimage.

Not that they are altogether to be blamed for this frame of mind. When one has been beaten and buffeted and used despitely it is not to be wondered at that one comes to be very much afraid of what the next day shall bring forth.

But bounding youth knows naught of this submission, and to make its kiss the rod, so to speak, when to it no rod is visible, far or near, is to breed up a spirit of impatience, not to say revolt.

We often behold an elderly aunt or perhaps a patient and devoted father or mother trying to make various young hopefuls see that they are prisoners in a vale of tears, and that under all chastenings they must try to be quiet, and humble; but young hopeful finds it all very much of a bore, longs to be away to kick free heels in a very good and joyous world of green fields and still waters, and will have none of it.

To preach that life is a matter of eternal sacrifice to the exuberant one of youth and health is to shake their faith in or doctrine as well as sanity. Religion, it is true, helps us to bear sorrow; but to speak only of this side of it is to make of it a matter of gloom; which is easily an injustice to the subject and a thing which will do it more harm than good.

Youth should hear rather of the doctrine of that love which showers joy and happiness. Let the matter of sorrow be left always in the background until the sad inevitable time comes when it must needs be inevitably faced.

Too sadly often is it true that life comes to be a matter of sacrifice sooner or later; but when it comes it is time enough to think of it or speak of it or preach resignation to it.

Not Like a Woman.

"Have you interviewed that female criminal?"

"I have tried to."

"Refuses to talk?"

"Refuses to talk! Head your article 'Man in Disguise,' and make it three columns on the first page."—Houston Post.

Approval.

"Do you think they approved of my sermon?" asked the newly appointed rector, hopeful that he had made a good impression on his parishioners.

"Yes, I think so," replied his wife, "they were all nodding."

Bunko.

Marriage, I'm told, is a lottery—

To me the saying's true; I think, forsooth, more often it is just a bunko game.

—Milwaukee Sentinel.

Never get into an argument over religion with anyone of whom you have some day want a favor.

Extremes of heat make more liars than frost and gulf.