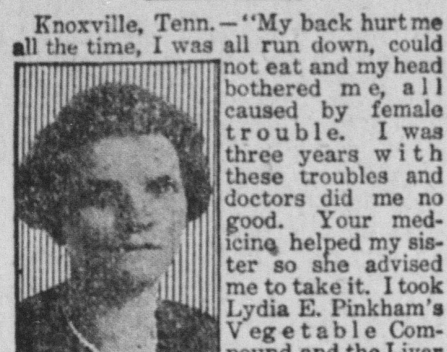


BACK HURT ALL THE TIME

Mrs. Hill Says Lydia E. Pinkham's Vegetable Compound Removed The Cause.



Knoxville, Tenn.—"My back hurt me all the time, I was all run down, could not eat and my head bothered me, all caused by female trouble. I was three years with these troubles and doctors did me no good. Your medicine helped my sister so she advised me to take it. I took Lydia E. Pinkham's Vegetable Compound and the Liver Pills and used Lydia E. Pinkham's Sanative Wash and now I am well, can eat heartily and work. I give you my thanks for your great medicines. You may publish my letter and I will tell everyone what your medicines did for me."—Mrs. PEARL HILL, 418 Jacksboro St., Knoxville, Tennessee.

Hundreds of such letters expressing gratitude for the good Lydia E. Pinkham's Vegetable Compound has accomplished are constantly being received, proving the reliability of this grand old remedy.

If you are ill do not drag along and continue to suffer day in and day out but at once take Lydia E. Pinkham's Vegetable Compound, a woman's remedy for woman's ills.

Thirty Running Sores

Remember, I stand back of every box. Every druggist guarantees to refund the purchase price (35 cents) if Peterson's Ointment doesn't do all I claim. I guarantee it for eczema, old sores, running sores, salt rheum, ulcers, sore nipples, broken breasts, itching skin, skin diseases, blind, bleeding and itching piles as well as for chafing, burns, scalds, cuts, bruises and sunburn. "I had 30 running sores on my leg for 11 years, was in three different hospitals. Amputation was advised. Skin grafting was tried. I was cured by using Peterson's Ointment."—Mrs. F. E. Root, 28 Michigan street, Buffalo, N. Y. Mail orders filled by Peterson Ointment Co., Buffalo, N. Y.

Liggett's
KING PIN CHEWING
The tastiest tobacco you ever tasted.

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Mail Us 20c With Any 35c Film for development and 6 Velvet Prints, or send 6 negatives, 35c prints, or 6 Beautiful Mounted Enlargement. Our nearest store is at 1110 East 12th Street, Buffalo, N. Y. Full Details and Price List on request.
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The KEY to LEARNING, to WISDOM, to PERSONALITY, to SUCCESS. The most useful Personal Efficiency Course yet. Teaches how to think straight and reason accurately. Better than a year in College, and at ONE-TENTH the cost. For young people and teachers. Get it now at before publication rate.
THE AMERICAN TEACHERS GUILD
Will not appear again. GREENVILLE, OHIO

Still Thrifty.
He was so miserly that the girl's family twitted her much about it. In desperation one night she decided to give him a very strong hint that she would like to have him occasionally buy her a box of candy. They were standing in front of a drug store window, which was filled with boxes of candy. The girl looked at them a minute and said archly, "Do you know that there is a kiss at the bottom of everyone of those boxes?"
The thrifty young man looked at them. "Well, some day when I have plenty of time," he said, "I'll go in and look under one to see if I can find any."

Wright's Indian Vegetable Pills are simply a good old-fashioned medicine for regulating the stomach, the liver and bowels. Get a box and try them.—Adv.

Aren't Wives Unreasonable?
"All very well for you to preach economy," said his wife, "but I notice whenever I cut down expenses that you smoke better cigars and spend more money for your own pleasure than at any other time."
"Well, confound it, what do you suppose I want you to economize for, anyway?"—Boston Transcript.

Spiritualists tip the table, but the man who tips the waiter fares better.

Sure Relief
BELLANS INDIGESTION 25 CENTS
6 BELLANS Hot water Sure Relief
BELLANS FOR INDIGESTION
Cuticura Soap AND OINTMENT Clear the Skin
Soap 25c, Ointment 25c and 50c, Talcum 25c.

PASTURING HOGS MOST ESSENTIAL

Interesting and Instructive Experiments Made With Sows at Illinois Station.

SIZE OF LITTER INCREASED

Popular Belief Substantiated That Young Mothers Produce Smaller Pigs—Variation in Length of Germination Period.

A careful study of records relating to the birth of 720 litters of pigs at the University of Illinois reveals many sidelights for those interested in hog raising. The 720 litters contained 5,840 pigs of seven distinct breeds. The following conclusions are drawn in bulletin No. 226 of the University of Illinois agricultural experiment station.

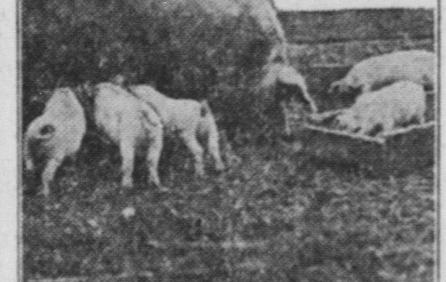
On the whole, the belief that young sows produce smaller pigs than do older sows is substantiated. Likewise the data substantiated popular belief that up to a certain age, about three years, there is an increase in the size of litter as sows grow older.

The older sows farrowed 12.3 per cent of dead or immature pigs as compared to 8.1 per cent by the younger sows.

It is doubtful whether there are any variations in farrow attributable to the season at which pigs are farrowed.

In succeeding litters from the same sow there was an increase in number of pigs per litter and in the weight of individual pigs until the fourth litter, at which time the sows were three and one-half years old.

The records obtained from 540 litters showed a wide range, 98 to 124 days, in the length of gestation period, with an average of 114.58 days. However, 93.6 per cent of the litters were



Farmers Should Be Careful That Pig Pens Are Clean and Dry.

farrowed between the one hundred and eleventh and one hundred and seventeenth days. The general belief that old sows have a gestation period one to three days longer than younger sows seems to have no very good basis.

Neither Sex Predominates.
There was little, if any, correlation between the length of gestation period and the birth weight of pigs, and the sex of pigs in relation to the length of gestation shows no tendency for either sex to predominate more than normal.

The average size of litters was 8.1 pigs. The average weight of a litter was about 20 pounds. The average weight of pigs in litters with fewer pigs than the average was 2.97 pounds, and in litters with more pigs it was 2.57 pounds. The grand average of all pigs was 2.55 pounds.

PROVIDE GOOD GREEN FEED

Unoccupied Space in Garden Should Be Seeded to Rapid Growing Crop of Some Kind.

The average poultry keeper is always short of succulent green feed during the late summer and early fall, and provision should be made for a supply. Every bit of ground in the garden from which early crops have been harvested should be seeded to chard, rape, lettuce, kale or whatever makes the most rapid growth in your locality.

ALFALFA AND SWEET CLOVER

Two Crops Are First Cousins But Differently Different in Making Their Growths.

Cut alfalfa when the buds of the second growth begin to show at the crowns of the plants. Cut sweet clover when the blossoms are about half out and raise the sickle bar at least four inches. These two crops are first cousins but they are decidedly different in this respect: Alfalfa shoots from a crown; sweet clover shoots from buds on the main stem.

CAUSE OF OVERGROWN WINGS

Result From Defective Brooding Conditions or Lack of Vitality—Clip Them Off.

Overgrown wings in brooder chicks result from defective brooding conditions or lack of vitality. Often the wings really are not overgrown but only appear so because the chicks, being weakly, let them hang down. If they develop to the point where they are a burden to the chick they should be clipped off.

AUTUMN IS CLEARING TIME FOR FARM LAND

Convert All Waste Places Into Revenue Producers.

Goats, Sheep or Cattle Are Favored in Order Named for Keeping Down Sprout Growth—Methods for Removing Stumps.

The fair-weather days of the autumn afford the farmer an opportunity to undertake the clearing of land for which he has no time in the busy summer months, and which can not be done while the land is wet in the spring. On thousands of farms there are cut-over tracts which should be converted into revenue producers as soon as possible. If the owner decides that the land in question is better suited to crop production than to forest growth, a careful study of the most economical method of removing stumps and small growth should be made. Most cut-over land passes through three stages before reaching its greatest agricultural value. The waste and small growth is disposed of first, then it is allowed to remain in stumps for a few seasons, until the smaller stumps are dead and decayed, during which time it is used for pasture or may be cultivated. Finally, all the stumps are removed.

Generally it is best to cut brush as close as possible to the ground and avoid leaving sharp points that might injure stock. However, if the wood is of no value and the ground is not to be cultivated before the stumps are removed, it may be best to cut the trees rather high above the ground. If the stumps are left three feet high there will be less sprouting than if cut low down, and such stumps are more easily pulled.

The most successful method of keeping down sprout growth is by heavy pasturing by goats, sheep, or cattle, in the order named. Any sprouts not killed by pasturing should be cut off with the head of an ax. There are a great variety of methods used in removing stumps, by means of burning, pullers and dynamite. Farmers' Bulletin 974, "Clearing Land," prepared by the United States department of agriculture, contains information designed especially for persons interested in this subject. A copy can be had on request.

PREPARE LAND FOR ALFALFA

One of the Best Ways to Get Moisture and Well-Packed Soil Is by Disking and Rolling.

Fall seeding of alfalfa requires moisture and a soil which is well packed. One of the best ways of getting such a condition is to disk the ground as soon as oats or small grain is taken off, then plow it and pack it thoroughly by harrowing or rolling. Soil which has been in a cultivated crop and removed early, such as early potatoes, makes good ground for fall seeding. On ground of this kind a thorough disking and harrowing will often put it in good shape for alfalfa. On many of our types of soil alfalfa will do better if limestone is applied. This limestone should be applied after the ground has been plowed and then harrowed in to give best results.

SWINE FOR WINTER MARKETS

Temptation to Fatten Quickly on Corn Alone Is Liable to Cause Loss of Animals.

Hogs for the early winter markets should be carefully fed. The temptation to fatten quickly on corn alone is liable to cause the careless farmer the loss of one or more animals. A better and a safer feed is wheat middlings and wheat bran made into a thick slop. Give a feed of this just what the hogs will eat up clean twice a day, then give a moderate feed of corn.

POTATO DISEASE EXPLAINED

So-Called Blight Due to Tip-Burn or Small Insect Known as the Leaf-Hopper.

Much of the so-called potato blight which is to be found is due to what is really tip-burn, or it may be due to a small insect known as the leaf-hopper. The tip-burn is caused by the dry weather and extreme heat as the sun and wind draw the water from the plant faster than the roots can supply it from the ground. The leaf-hopper is a small, greenish-like insect, which will be found jumping from one plant to another as the plants are moved.

BORER EATS CLOVER ROOTS



Here are three life stages of one of the worst clover pests, the root borer. The root borer will attack peas as well as clover. The larvae and the beetles of the borer literally riddle the roots of the clover plant. The borer may be the trouble with that sickly, "spotty" clover patch of yours. Do a little investigating.

Highway Improvement

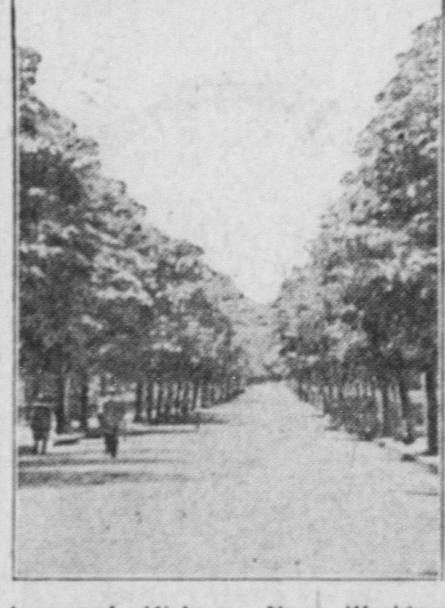
ROAD BUILDERS STUDY SOILS

Highway Engineers Expected to Obtain Important Information by Investigation.

An investigation which promises to place at the disposal of highway engineers important information regarding the relation of soils to highway durability has been undertaken by the bureau of public roads, United States department of agriculture. This work includes taking samples of soil at spots in the subgrade of a highway where the road has begun to fail, studying surrounding geological conditions to determine how moisture arrived in the subgrade, thus destroying its value; making laboratory tests to determine the physical characteristics of soils, and obtaining a scientific measure of the bearing value of soils. In this investigation it is proposed to obtain as much co-operation as possible from the various state highway departments. The bureau of soils is co-operating with the bureau of public roads in this work.

Preliminary investigation has been started in Maryland on the Washington-Baltimore road, and will be extended beyond Baltimore and on other roads in Maryland. Progress has been made in the matter of laboratory tests, a number of samples of subgrade material and other samples already having been examined.

The federal highway engineers point out that soils differ widely in their ability to support loads, particularly when they are wet. Just why this is true and just what are the characteristics which make them different is little understood at present. It is in



Improved Highway Near Washington, D. C.

this field of investigation, of increasing importance because of the growing volume of heavy traffic, that the federal investigators expect to secure important information.

POOR ROADS ARE HINDRANCE

Farmer Made Unable to Take Advantage of High Prices—Cost of Market News Wasted.

Today the farmer has wire communication facilities unsurpassed in the history of the United States. He knows, day by day, the fluctuating prices which prevail for his produce at the marketing points and knowing these things he can arrange to get his goods to market on the day when the price is the highest if the road is good. If the road is bad or impassable then much of the effort which has been expended in getting the news of market conditions to him is lost.

MONEY TO IMPROVE HIGHWAYS

Counties and States Appropriate \$1,000,000,000 for Improvement of Local Roads.

Our counties and states have recognized the economic importance of road construction by appropriating more than \$1,000,000,000 to local improvements. It is the nation's part to build and maintain highways, which are of national importance and which will serve to effect economy, facilitate interstate commerce and strengthen the common defense.

WEEDS ARE VEXING PROBLEM

One of Principal Reasons Is That Farmers Have Permitted Plants to Spread Over Land.

One of the principal reasons weeds are such a serious problem on many farms these days is that farmers and land owners failed to keep a close watch of fields for new weeds and to have them identified before they had spread over such large areas as to make their eradication costly.

Joy Riders on Farms.
The day when the city dweller could be looked on as a joy rider and could be accused of wishing roads for his personal benefit and enjoyment has passed, for there are more joy riders living on the farms than in the cities.

Service Is Requirement.
Modern roads are being built or planned with service as the primary requirement. The interests of both the business man and the farmer are served in the comprehensive programs for road work now under way.

OIL REFINING PROFITS

Why Has the Price of Gasoline Advanced?

THESE topics have been discussed in our past articles, and a great many people have written for our circular giving more information of the Oil Refining Business. Many investors have bought our securities, as they wish to participate in the enormous profits being made in that industry.

FEDERAL OIL & REFINING CO.

(INCORPORATED)
This Company owns refineries at Cushing, Okla., and Fort Worth, Texas; two casinghead gasoline plants in Oklahoma, eight producing oil wells; over 10,000 acres of carefully selected oil leases located in Texas and Oklahoma; and twelve retail filling stations. The Company paid

30% IN DIVIDENDS

between November 1st, 1918 and January 10th, 1920. The President of the Company states that the estimated earnings per annum from its present refineries, casinghead plants, filling stations, production and expansion are practically 100% on the outstanding stock.

The FEDERAL OIL & REFINING COMPANY is principally a refining company, and as we have stated in the past, we believe there is no industry in the country in which the margin of risk is so small, and the average returns from invested capital so great as in the Oil Refining Business.

We own and offer for subscription stock of the FEDERAL OIL & REFINING COMPANY. This offering is made for a limited time at

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This is your opportunity to participate in the Oil Refining Business. Write at once for circular "CR," which will give you the complete history of this Company and detailed description of their holdings. "Address"

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The silk industry of China employs, it is estimated, from 4,000,000 to 6,000,000 workers.

A single application of Roman Eye Balsam on going to bed will prove its merit Use it for inflammations of the Eyes.—Adv.

After a man has passed the chloroform age he begins to lean toward the simple life.

Naturally.
"How was the actor who took the part of the top in the play?"
"Oh, he was a dandy."

The Reason.
"There is no royal road to good writing." "I should say not. The first requisite is a subject."

Her Way.
Belle—Did you enjoy the play?
Nell—Oh, I had a perfectly lovely time. I cried straight through the whole four acts.

Exchanging Confidences.
Edith—Dear Jack is so forgetful.
Maud—Isn't he. At the party last night I had to keep reminding him that it's you he's engaged to and not me.—London Answers.

In a Tender Spot.
Mr. Benover—No, I wasn't wounded in any engagements in France, but I was sorely wounded in my late engagement with Miss Leech.
Miss Romantic—In the heart, I presume?
Mr. Benover—No, in the bank roll.

Schedule Too Important.
A little girl was playing "trains" when she knocked into an old woman. The child took not the slightest notice but carried on with her game.
A little later she again passed the old woman, having finished her game.
"When you knock into anyone," said the injured dame, "don't you know you ought to say: 'I'm sorry?'"
"What?" returned the little girl. "Do you think an express train stops to say that?"

Gone for the Day.
My boss had given me some special work to do, and had departed saying he would not return that day, writes a correspondent. It was exceedingly warm and to work was torture. Putting my books and papers away, I selected the most comfortable chair in his office and sat down to read a magazine which I found on his desk. You can imagine my chagrin when he returned in an hour and asked for the work.

HAD LOFTY IDEA OF DUTY

Janitor's Sense of Responsibility Somewhat Embarrassing in This Particular Case.

The principal of a city school building is still young and has a very attentive admirer. Occasionally he comes to the school building after her and takes her home in his roadster. The other afternoon she was finishing reports and the young man came into her room until she was ready to go.

The janitor finished his work and she told him that he could leave whenever he wished to do so, and they would close the building. But still he lingered until they left. The next morning he explained his stay by remarking that he was late getting home the evening before. "But you could have gone home," reminded the principal. "I told you we would close up."

"Yes, I know," he returned, "but you see, Miss T., it's this way. The board holds me responsible for this building and I'm not willing to leave it in charge of a perfectly strange man."

Mother's Opinion.
A rather prominent old bachelor of Indianapolis the other evening went home with one of his friends for supper. Now, the friend has a six-year-old son, who is lively indeed and the bachelor was much interested in him. At the supper table he asked the youngster, "Now, Bobby, when you grow up are you going to get married like your father did or are you going to be an old bachelor like I am?"
Back came the little fellow's immediate answer: "Oh, I'm not going to be an old bachelor. Mother wants me to amount to something."
Since then the bachelor has announced himself as a willing candidate for a leap year girl.

The Greater Trial.
A bride of a few months was deplored the treatment of her husband to her mother, and between her sobs was saying:
"You see, mother, I've only been married a few months, and George goes out nearly every night and leaves me all alone."
Her mother did her best to comfort her.
"You must not upset yourself, my dear," she said. "How little you know of the real trials of life, and little do you know what I have suffered. Why, your father never goes out at all!"
Most women have reasons of their own for being man haters.

Cut Down the Sugar Bill
by eating a cereal that contains its own sugar self-developed from grain in making—
Grape-Nuts
As a breakfast or luncheon cereal with cream or milk; or sprinkled over fresh fruit or berries, Grape-Nuts adds to the meal's pleasure—and is economical.
Buy from your grocer.