



HIGHER THAN WOOLWORTH BUILDING

Year's Sales of Lydia E. Pinkham's Vegetable Compound



MRS. E. DAUGHERTY, 1808 ORCHARD AVENUE, MUSCATINE, IOWA

The Woolworth Building in New York City, which towers 792 feet above the street, is the highest building in the United States.

Lydia E. Pinkham's Vegetable Compound. In a recent letter, Mrs. Daugherty says, "I was ill for four months before I took your medicine."

Mrs. Carr Also Helped. "I could not get around to do my work. I took treatments and they did me no good. I had always heard of Lydia E. Pinkham's medicine and I thought it would be like all the others, but I found out after I took half a bottle, and I have proved it wonderful."

Advertisement for Mrs. Winslow's Syrup for babies, mentioning its use for colic, worms, and other ailments.

Advertisement for Dr. Scholl's Corns, claiming to remove corns in one minute.

Advertisement for Dr. Scholl's Zino-pads, for relief of various pains.

Advertisement for Royalty Honors Parents, offering a special visit to a village in East Flanders.

Large advertisement for Fletcher's Castoria, highlighting its benefits for children and its status as a 'Wholesome Influence of Athletics Is Big Need'.

Large advertisement for Bayer Aspirin, featuring the Bayer logo and the slogan 'SAY "BAYER ASPIRIN" and INSIST!'.

Cub Cast-Offs Help Cardinals



A great deal of the success of the St. Louis Cardinals in the race for the National League pennant has been due to the consistent work of Grover Cleveland Alexander (left) and Bob O'Farrell, two Chicago Cub cast-offs.

Tod Sloan Best Jockey, Says Snapper Garrison

Into a gathering of horse owners and trainers, which had been discussing the prowess of two great former jockeys—Snapper Garrison and Isaac Murphy—walked the gray-haired Garrison himself not long ago.

Sporting Squibs

Peoria sold outfielder Harry Layne to the St. Louis Cardinals. The price was given out as \$8,000.

Purchase by the White Sox of Everett Purdy, outfielder of the Lincoln club of the Western league, is announced.

Manager Oscar Stange of Evansville was enriched \$100 by reason of being selected the most valuable player to his club.

Low Fozzaca, in the National league for several seasons, prior to this spring, has been purchased by Cleveland from the Newark club of the international league.

William B. Friedlander, well-known theatrical producer, has hired Benny Leonard, the retired, lightweight champion of the world, into the musical comedy ring this season.

President Davidson of the New England league announces that he has signed Eddie Shelvin, former New England welterweight champion, as an umpire in the New England league.

Washington has released Jimmy Smith, Salem (Ohio) semi-pro catcher, unconditionally. With the purchase of Brandon from Portsmouth of the Virginia league, Smith's services were no longer required.

Clarence Griffin, left-hand pitcher, now with the Memphis, Southern association, club, may be a Giant next year. Negotiations now are under way. It is understood, for the sale of Griffin to the New York club.

Harold Olson, former Badger football and basketball star, has a new assignment at Ohio State university this year. In addition to coaching the basketball team, Ol will assist Jack Wiese with the grid squad.

John W. Heisman, veteran of twenty-four years' football coaching, is starting his third season at Rice institute, Houston, Texas, and is expected to produce a contender for the Southwestern Conference crown.

Cy Young's attempt to set a world's record for consecutive games pitched was shattered in 1922 after he had made a run of 15 by a home run by Mark Baldwin of the Pittsburgh club, who was a regular 237 batter.

Danville purchased Dutch White, manager of the Cedar Rapids team of the Mississippi Valley league. He is reported to have been the youngest pilot in organized baseball this year, being but twenty-two years of age. White is an infielder.

Big Year for Kassel. Charles E. Kassel of Melrose Park, Ill., captain of the 1921 University of Illinois football team, is looking forward to a great season. Last year "Chuck" was generally selected as "all-conference" end. He has won two letters in basketball, playing at back guard.

Longest 1925 Grid Run. The run of 92 yards by Jacob Single of Princeton against Yale was the longest scoring run from scrimmage made upon any collegiate gridiron in the United States last season.

Four Homers Off These Two. In the 800 or more games that Cy Young pitched in the major leagues he allowed only 15 home runs to be made off his hurling, an average of less than five a season.

ONCE WAS ENOUGH FOR BEN LEONARD

Breath Knocked Out of Fighter in Grid Game.

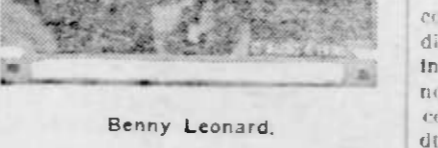
Before Red Grange opened the eyes of the public to the possibilities of football as a profession, the boys who took a beating for an hour on the grid iron for a few cheers were looked upon as goofs by the boys who made their living with gloves, a hockey stick or a baseball bat.

"What suckers," they would say. "To do all that for nothing. These cheerers don't pay no bills."

It has been related that Benny Leonard, one of the best business men ever associated with professional boxing, once tried his hands and feet at football.

Leonard was attached to the entertainment at Camp Upton, N. Y., as a boxing instructor. He became acquainted with Eddie Mahan, one of Harvard's immortal football stars, who was organizing a camp team.

Mahan induced Leonard to get into a uniform and participate in a little scrimmage one afternoon. The lightweight champion took a shot at it and lasted for one play. He was taken out of the play so hard by one of the op-



Benny Leonard.

posing freshmen that he had his breath knocked out. "No more of that crazy game for me," Leonard said. "I'm no damn fool."

Mahan explained that he would not have been taken out so hard if he had known how to handle himself. "Why should I learn how to handle myself for such a game? There's nothing in it, anyway," Leonard replied.

BASEBALL SQUIBS

Norfolk has sold Dick Atrean, star first baseman, to the Philadelphia Athletics. The price was reported to be \$11,000.

Cosmo Catello, southpaw pitcher, has been purchased by Danville from the Rock Island club of the Mississippi Valley league.

William Harris, pitcher, has been recalled by the Minneapolis American association club, from which he was obtained by Memphis.

Washington has signed James (Big) Smith, a nineteen-year-old catcher, who has been playing with the Elks' team at Salem, Ohio.

Calvin McVey, member of the undefeated Cincinnati Red Stockings of 1889, coached a record of hitting the ball over the fence in every park he played.

Third Baseman Phillips of the Reading (Pa.) team in the International league is the son of a Methodist minister and his contract permits him to refrain from playing on Sundays.

Ted Lyons, White Sox pitcher, who entered baseball's hall of fame via a no-hit no-run game, made his big league debut upon the recommendation of Ray Schalk and didn't cost the Chicago club a penny.

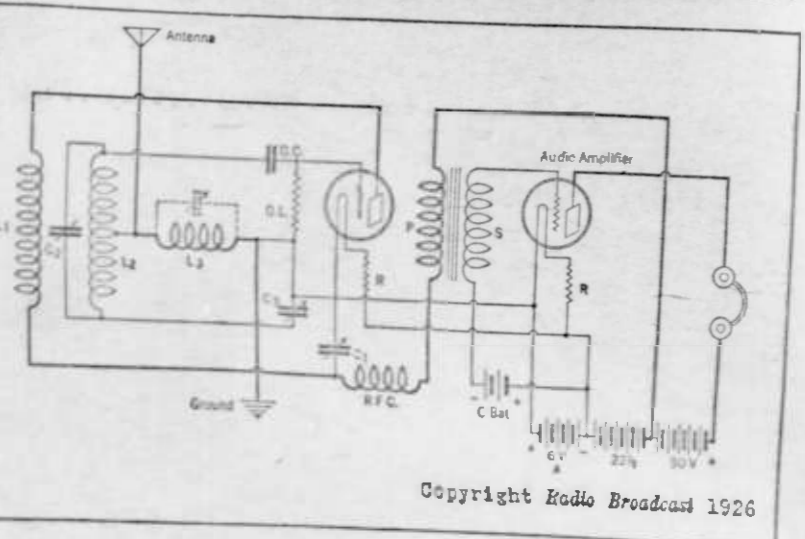
Ty Cobb declares there is nothing to the report that he intended to retire as manager of the Tigers. "I guess some of the fans hope it's true, or at any rate they hope I'm through as a player," said the Georgian.

The Chicago Cubs of 1906 finished the season with the best record of any team in the history of the major leagues, 110 victories and 36 defeats for a percentage of .753, but lost in the world's series to the White Sox, known as the "Hitless Wonders."

Reports have it that a movement is on foot to bring the old Central league back in 1927. It is said that Charley Schmidt, veteran catcher, has closed a lease on the park at Fort Wayne, Ind., with a view to getting a franchise there in the proposed circuit, which would include South Bend in Indiana, and probably Gary, also in Indiana.

Walter Roetger, Syracuse fielder, is hailed as the best ground-covering fielder in the history of the major leagues. He joined the Stars after leaving the University of Illinois last season. The Cardinals have promised Syracuse that he will not be called to the majors until the close of the 1927 season.

RADIO



A Two-Tube Short-Wave Receiver.

Of all the receivers submitted for the judges' approval in the Radio Broadcast Magazine \$500 contest for a short-wave receiver that would not radiate, not a single one of them could meet this latter requirement.

About fifteen receivers were selected for consideration out of all those entered in the contest. Exhaustive tests conducted at 2 CY, the experimental short-wave station of Radio Broadcast, showed that all of the receivers submitted by contestants did radiate. To determine those which radiated the least, the following tests were made: At station 2 CY a standard Reimartz receiver is in use.

By keying the plate circuit of this receiver, code was transmitted to another receiver in the office of Radio Broadcast, some 400 yards away. Later, when a microphone was placed in the ground lead of the Reimartz, speech was readily understandable at the office. The contest receivers were compared to this set. Those which radiated as badly were at once eliminated. It soon became apparent that not one of the surviving group of the contest receivers satisfied the conditions of the contest. With the permission of the judges, Boyd Phelps, Prof. L. A. Hazeltine, Zeh Bouck, G. C. Furness, Arthur H. Lynch, Edgar H. Felix, Dr. Lawrence Dunn, Prof. J. H. Morecroft and Dr. A. Hoyt Taylor, and the designers of the receivers which came nearest to satisfying the conditions, it was decided to award \$100 to the designer of the receiver which radiated the least and which was, at the same time, sensitive. The receiver chosen for the \$100 award was designed by Frank C. Jones, operator of 6ACE, of Berkeley, Calif., and is shown in the schematic diagram. In this receiver radiation is practically eliminated if due care is taken in making the final balance adjustments. There is nothing startlingly new about it except that the principle of the Wheatstone bridge is incorporated.

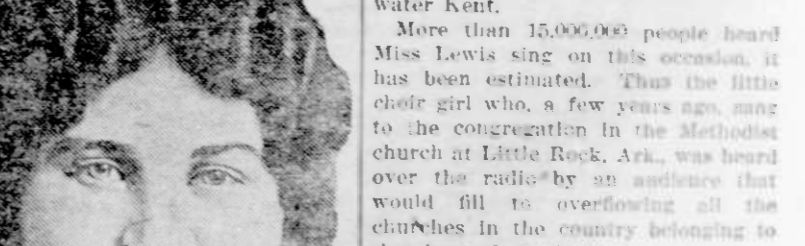
The Condensers. In the article in Radio Broadcast Magazine, photographs are given so that the would-be constructor may approximate the layout of the original, but, as Mr. Jones points out, most amateurs will wish to use their own ideas in this matter. The two variable condensers, C1 and C2, are of approximately 0.0001 mfd.

Our next consideration concerns the coils. In the diagram, L1 is a fixed tickler coil coupled to the tuning inductance, L2, while the antenna coil, L3, which is shown with an optional tuning condenser dotted across it, is mounted as far from the other coils as possible. It is recommended that two binding posts be arranged on a strip of hard rubber so that this coil may be connected to them and yet be located outside the receiver some two feet or so away. The center-tapped coil, L2, is a space-wound one with a 3-inch diameter. For the smaller coils, No. 16 d. c. c. wire is used, while No. 18 d. c. c. is recommended for the larger ones. The tickler coils are wound on 2-inch diameter cardboard forms, these forms being removed after the coils have been made right with a coating of collodion. L3 consists of from 5 up to 30 turns, and may be wound in the same manner as L2. The following tables give the turn numbers for the various frequency bands:

Table with 4 columns: Frequency Band, Turns for Frequency Bands, Turns for Frequency Bands, Turns for Frequency Bands. Rows include 2-12 Mc, 12-18 Mc, 18-25 Mc, and 25-30 Mc.

By virtue of the fact that the diameter of the tickler coil is less than that of the coil it is coupled to, the former is mounted concentrically within the latter, and is held there with thick tacks.

The largest radio audience that has yet listened to any singer heard Mary Lewis, famous soprano of the Metropolitan opera, when she broadcast simultaneously from 46 stations throughout the country.



Mary Lewis.

The occasion was the annual radio industries banquet held in connection with the New York radio show, at which Miss Lewis was the headliner, singing through the courtesy of A. A. Water Kent.

More than 15,000,000 people heard Miss Lewis sing on this occasion, it has been estimated. Thus the little choir girl who, a few years ago, sang to the congregation in the Methodist church at Little Rock, Ark., was heard over the radio by an audience that would fill to overflowing all the churches in the country belonging to that large denomination.

Miss Lewis has had an interesting career, having started as a choir singer, and then, graduating from the Pollock, studied in Europe and came back to America as the recipient of as great attention as was perhaps ever given a grand opera star.

Ways of Connecting Dry Cells for Radio

There are three ways of connecting up dry cells—series, parallel and a combination of both, series-parallel. When a series connection is desired, the center contact of one dry cell is connected to the outer one of the next cell and the center of that to the outer of the next, etc. When a parallel connection is desired, the inner terminals of all cells are connected together and then the outer connections of all cells are connected together. A combination of the two is cells in series and then the two groups connected to each other properly to make up a useful radio battery.

If the old auto battery is a 12 volt, as on some cars, three of the best cells can be lifted out and combined into a good 6-volt battery. Although the cells are smaller than found in the ordinary 6-volt auto battery, for radio service the small cells can easily supply the needed amount of current up to perhaps two amperes.

Sweden Widens Radio Use

An extensive system of radio beacons and submarine signaling devices that would cover the entire Swedish coast is being planned, according to advices to the Department of Commerce. The chain of stations would greatly decrease the danger from fog in waters on the Swedish coasts.

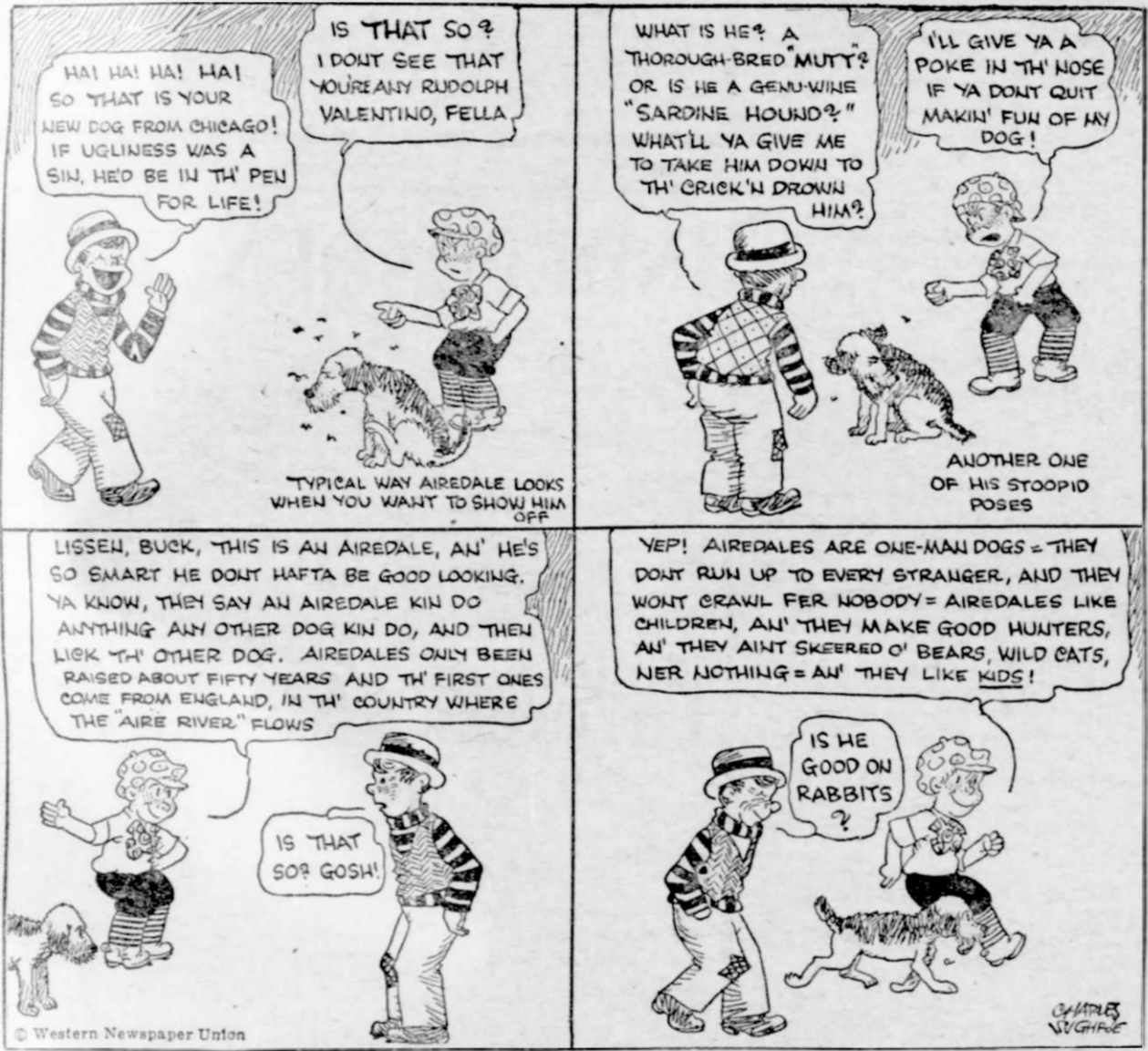
Use Long Wave Lengths. Long radio wave lengths are sometimes used in Europe. Of the 137 European radio broadcast stations, 29 operate at wave lengths over 600 meters and 109 at less.

# OUR COMIC SECTION

## Our Pet Peeve



## MICKIE, THE PRINTER'S DEVIL



## All About Airedales

# Milk Secretion Process in Cow

## Novel Experiment Conducted at Federal Dairy Farm at Beltsville.

(Prepared by the United States Department of Agriculture.)

A novel experiment to determine whether the milk in a cow's udder is manufactured during the few minutes required for the milking process, as is generally taught, or whether it is secreted continuously and collected in the udder previous to milking, was conducted recently at the federal dairy experiment farm at Beltsville, Md., by W. W. Sweet, bureau of dairy industry, United States Department of Agriculture.

A rather general belief persists among teachers and other professional men in dairy cattle and veterinary work, says Mr. Sweet, that the internal capacity for storing milk in a cow's udder is not more than a half pint to each quarter. This belief, however, is not supported by the facts. It is taught, therefore, that the milk must necessarily be manufactured during the process of milking, and that it does not exist as milk until the mammary gland is stimulated by the milking operation.

Capacity of Cow's Udder.

In these tests it was found, however, that a cow's udder is capable of holding from 11 to 20 quarts of milk instead of a quart, as is quite commonly taught. For the tests, two cows were killed, their udders immediately removed and mounted on a framework in a position for milking. One of the cows had normally been giving about twelve pounds at a milking. A total of 10.75 pounds of milk was drawn from her udder after all leaves had been severed. In comparison, the other cow, which had been producing more than 85 per cent of her production was stored in her udder at the time she was slaughtered. The post-mortem milking of the second cow yielded practically 50 per cent of her normal production. In her case milking was more difficult and all the milk was not drawn as was shown by the considerable quantity which gushed forth when the udder was later cut open.

A further indication of the enormous capacity of a dairy cow's udder has been shown by the quantity of liquid which is often possible to inject into detached udders being prepared for laboratory study. Mr. Sweet says that it is not uncommon to inject the equivalent of three to five gallons of milk, depending on different characteristics of various udders.

Continuous Process.

These few tests, while not to be regarded as conclusive, would indicate, says Mr. Sweet, that milk secretion is to a considerable extent a continuous process, and that a large proportion of the milk secreted at any milking is collected and stored within the mammary gland before milking. It is concluded, also, that liberation of the milk from the gland is not dependent either upon a nervous mechanical stimulation or upon muscular contraction, since all body connections had been severed before the post-mortem milking was performed.

The mammary gland, obviously, is one of the most important parts of the

dairy cow, yet its internal anatomy, its capacity, and its performance are but little understood, says Mr. Sweet. The project now being conducted by the bureau of dairy industry to determine the relation of the conformation and anatomy of the dairy cow to her milk and butter-fat producing capacity, has been developed to include an extensive consideration of the mammary gland. This newest phase in the study of the mechanism of the dairy cow promises to be most interesting and very productive of valuable information.

## Agricultural Scientists Disprove Popular Theory

The rather popular belief that hay cures more rapidly when the leaves are retained on the stems, due to the theory that the leaves act as pumps to draw the moisture from the stems, is not so well founded, says the United States Department of Agriculture. Extensive tests with alfalfa hay to determine whether or not any appreciable amount of water passes off through the leaves after the hay is harvested showed that stems from which the leaves had been picked lost their moisture even more readily than when allowed to cure in the natural state; that is, with the leaves attached.

The assumption that the leaves are important factors in the curing process is in part responsible for the oft-repeated advice to cure alfalfa in the windrow or cock so that the leaves will be retained in a living condition and continue to draw water from the stems. Curing hay in the windrow or cock is still good practice, however, because of the additional value, and because hay cured in this manner has a better color.

## The Moon and the Stars

Addison Mizner was talking at Miami about a Florida speculator who had failed.

"The man attempted the impossible," Mr. Mizner said. "He tried to make a colossal fortune out of a swamp. Result, ruin and disgrace.

"The child that cries for the moon," Mr. Mizner added, "is always made in the end to see stars."

Man wants but little here below, but he is afraid to try living by that plan if he can get more.

## Lubrication for Wagon Wheels Quite Important

Wagon wheels need more than to have the axles well greased; they would last several times as long as they usually do if they were oiled. Frequent oiling of the wood also eliminates the necessity of having the tires set from time to time by a blacksmith. The best method of oiling the wheels is to make a trough-like box which is put under them and filled with limeseed oil or other wood preservative. By turning the wheel slowly through the oil every part of the rim will be soaked with the oil. With a convenient jack the four wheels of a wagon can be thoroughly oiled in a short time. The trough can be kept from leaking by painting it.

## Dry Mash for Hens

Hens should have mash before them at all times, preferably in an open hopper. The following dry mash gives good results in egg production. The proportions are by weight: One part wheat bran, one part four middlings, one part ground corn or corn meal, one part ground heavy oats, one part meat scrap. Mashers or meat scraps do not cause cholera because this is an infectious disease. Sometimes the hens get too fat.

## FARM WOODLAND WILL UTILIZE WASTE SPOTS AND GIVE PROFIT

### Supplies Timber Requirements for Various Jobs.

(Prepared by the United States Department of Agriculture.)

A permanent woodland is an essential part of a well-equipped farm, says the United States Department of Agriculture. The home forest, in many sections of the country, supplies the timber requirements of the farm for buildings, fences, fuel, repairs of all kinds, and many other things. Furthermore, a surplus can often be sold in the form of standing timber, saw logs, posts, poles, cross-ties, pulp wood, fuel wood, and blocks or billets, barrels, and excelsior.

Trees improve the soil. The leaves, small twigs, and other tree litter decompose and form a layer of dark-colored vegetable mold, which enriches the soil and stores up soil moisture. By means of this layer of mold, the binding of the soil by the roots of the trees, and the resistance of the trunks to the rapid flow of water, the woods prevent floods from gullying or destroying the land by erosion, particularly on steep slopes.

The farm woodland can usually be located on land unsuited for cultivation, such as gullied or very rocky land, swamps, steep slopes, and barren soils. Unused corners and small uncultivated spots about the farm are

good places for rapid-growing, useful trees. The chief economic reason for utilizing the land for the crop that will bring the largest net profit to the owner.

## Eradicate Milkweed

The milkweed is a perennial which spreads both by seed and underground root stocks. With most varieties of roots in the ordinary season, the milkweeds will not produce seed at the time the roots are cut. However, they come on quite rapidly again after the roots are cut, and it is advisable to cut them again. If the land is then plowed in the early fall for corn and corn the year following is given clean cultivation, there should not be much further bother with the milkweed.

## Protecting Trees

You can protect your young trees from rabbits to a considerable extent by keeping the branches and trunks coated with concentrated lime-sulphur solution. However, rains will wash off this material and you may have to renew it occasionally. Some growers report success from using white lead paint. However, if this is employed, it must be scraped off the trunks as well as possible without damaging the trees in the spring.

## Poison From Red-Squill Bulbs Quite Efficient

According to results of experiments conducted jointly by the bureaus of biological survey and chemistry of the United States Department of Agriculture, a powder can be made from dried red-squill bulbs which has an efficient and uniform toxicity for rats, but at the same time apparently does not unduly endanger human beings or domestic animals. The use of powdered red-squill for the destruction of rats is comparatively recent in this country, although the poison has been in limited use in Europe for centuries. It has never come into popular use, however, even there, because of its tendency to vary greatly in potency. Several of the factors influencing its toxicity have been developed during the course of the present investigation. Officials of the Department of Agriculture anticipate that these experiments will be of material assistance in the production of a uniform and stable squill product. This form should greatly benefit poultrymen and farmers generally who hee-

## Value of Manure Found on Various Iowa Farms

There are two ways of placing a value on farm manure. One way is to apply the nitrate per pound of commercial nitrogen, phosphorus, and potassium to the number of pounds of these elements supplied in the manure; the other way is to credit manure with the crop increases it produces at given prices for these crops. Of these two methods the latter is more practical to the farmer.

The Iowa station has just issued Bulletin 230 which tells of the value of manure as found on 43 different fields in various parts of that state. The value of the increase in crops was computed from a ten-year average price. On this basis and that of the crop increase credited to the manure, a ton of manure was found to be worth \$1.97. The rate of application was eight tons per acre once in a four-year rotation.

## THE FEATHERHEADS



## You See - the BOSS Told It

## MEASURED



"They're quartz." Mrs. Ecks - "No, I don't think she has more than a pint."

## Quite a Hardship

"Let's see," said the chummy man, "your brother went abroad on a fellowship, didn't he?" "No," was the reply. "It was a cat-tle ship."

## Nothing Lost

HM Number One - "The trouble with me is I don't know my own mind."

HM Number Two - "Never mind, old top; you haven't missed much."

## Where She Shows It

"They say she is a very brilliant conversationalist." "Yes; you should hear her play whist."

## The Wrong Place

Young Robber - "Say, Spike, let's go in Lawyer Brown's house 'nite. Oldtimer - "He yourself, bo, he youse' d'j'a wanta lose everything y' got?"

## Saint as Castaway on Postage Stamp

Philatelists will be interested in the announcement that the Maltese authorities have chosen St. Paulus, convert of St. Paul, for the design of their new 18-penny stamp. The island is shown as a castaway on the island Salts have been popular subjects with stamp designers of the Mediterranean states.

England's own patron, St. George, was used by Crete 20 years ago, and in 1919 another Maltese issue showed St. Paul escaping shipwreck. Only recently Italian stamps were issued portraying the death of St. Francis of Assisi, of which the seven hundredth anniversary occurs soon, following the example of Portugal in commemorating the sept-centenary of the birth of St. Anthony of Padua.

A religious design, Madonna with child, was adopted by the Hungarian post office four years ago.—Cleveland Plain Dealer.



# WRIGLEYS

WRIGLEY'S satisfies the desire for sweets, it helps make strong healthy teeth, removes particles of food from teeth crevices, and aids digestion. So it is a wonderful help to health.



MEN, LEARN THE BARBER TRADE—Our course is complete and embraces every phase of the profession. Best equipped and most modern barber college in the world. No other trade or profession can be learned with such little time or money. The Wisconsin Barber College, 361 3rd St., Milwaukee, Wis.

WE PAY YOU CASH for old jewelry, watches, diamonds, gold pieces, diamonds, rubies, pearls, EMERALD GOLD, RUBY, SAPHIRE, CO., 59 Fifth Ave., NEW YORK. Send goods now. Inter-cosmos (Chatham-Plaza) Bank, New York.

Five Modern 110-Acre Dairy and Potato Farm for sale. Except fine build, etc. equipped. Best clay loam soil. Walter Niven, Sheridan, Wis.

W. N. U., MILWAUKEE, NO. 41-1923.

Know This Woman? "Yes, she smiled on a much better boat than we did." "I know. And the ocean she used was far superior to the one we traveled over."

# WORLD-WIDE sales of quality cars and trucks

General Motors cars and trucks are sold and serviced in 104 countries. The export shipments in 1925 amounted to 119,632 motor vehicles; and the overseas assembly plants and warehouses of General Motors now number 19. This vigorous development of the world-wide market for a complete line of quality cars is important to the car buyer. It is not only a contribution to international prosperity and progress, but it also helps to maintain the continuous production program at the factories, on which low prices depend.

# GENERAL MOTORS

- "A car for every purse and purpose"
- CHEVROLET · PONTIAC · OLDSMOBILE
- OAKLAND · BUICK · CADILLAC
- GMC TRUCKS
- YELLOW CABS, BUSES AND TRUCKS
- FRIGIDAIRE—The Electric Refrigerator

Household bookkeeping helps; At some time in his life, a man is though it may be like the death's head likely to reach the conclusion that as a feast, nothing is wholly true.









