

ORCHARD and GARDEN

HOW HEN LICE BREED.

No bird or animal is tormented with lice more than the domestic hen, yet she takes greater care of herself than any other living creature, as she makes her toilet daily, arranging every feather and resorting to every method to rid herself of the pests, which efforts would be successful if she could control the conditions for breeding lice. Those who build poultry-houses seek to save as much of the cost as possible, and by so doing they are liable to leave so many hiding places for lice that it is almost impossible to reach them except with tedious and patient labor. If the walls of poultry-houses were plastered, the smooth surface presented would greatly facilitate the keeping of the house clear of lice, but plastered walls are more expensive than rough boards, and will not be generally adopted. Lice breed in the hiding places that can only be reached with liquids, so that everything in the house must be completely saturated in order to destroy them; they also breed in the nests and in the droppings. The red mites go from the roosts to the hen, and she clears them off with the dust bath, only to be supplied from the house when she goes on the roost again. The large gray lice breed on the bodies of the hens, and are never found in the poultry-house. They are difficult for the hen to remove, as they cling tenaciously to the skin of the head and neck. Any kind of grease, however, will destroy them, and oil being excellent. Recently, the use of insecticides for spraying trees has brought to notice the kerosene emulsion as a remedy for lice, but there is nothing that will serve so well to apply the emulsion as the sprayer, which projects a spray as fine as dew, and which can be made to spread over every square inch of surface. If there are holes or crevices around posts, where the boards are nailed on, pure kerosene may be poured around them out of an oil can, and for the roosts use also the undiluted kerosene. Now is the season for lice, and there is plenty to do to keep them down.—Weekly Witness.

SEEDLING APPLES OF MAINE.

Bulletin 143 of the Maine station, "The Seedling Apples of Maine," is just being sent out. The purpose of this bulletin is to call attention to those varieties of Maine origin which are worthy of wider dissemination; and to record, as accurately as possible, the history of such varieties. While Baldwin, Greening, and other standard varieties, mostly of New England origin, will doubtless remain for many years the leading market sorts, new and valuable sorts are continually appearing, and these will be most likely to excel near their native home, or in their native State. The wholesale injury to orchards by the cold of the past few years is also an incentive to search out the merits of native hardy varieties. Among the most valuable of the thirty-eight native sorts mentioned in the bulletin, are Deane, Dudley, King Sweet, Rolfe, Starkey and Stowe. Some of those described in pomological manuals are said to be wholly or practically extinct; though at one time of considerable importance. An effort is being made at the station to collect in a "Maine Orchard" such native seedlings as seen to merit attention, and owners of valuable seedling apples are requested to forward specimens of the fruit for examination.

CRUSHED OATS FOR HORSES.

Australian horsemen are divided as to the propriety of crushing oats for horses. The reason advanced in supporting crushed oats is that they are more thoroughly digested than whole oats. That, however, it is said, is not the reason which mainly influences the farmer. He finds that when his horse feeds on crushed oats germinating power of the wild oats which may be mixed with it is destroyed, and thus his paddocks are kept clean longer than would be the case if the oats were not crushed. As a matter of fact the crushing of oats does not increase or promote their digestibility. The molar teeth of horses possess great grinding or crushing powers and a horse whose teeth are in a normal condition is perfectly well able to chew or masticate whole oats in a thorough and complete manner. Crushed oats require less grinding on the part of the horse than whole oats, and the former for feeding to animals that are troubled are therefore more suitable than the latter with their teeth. Men with long experience of horses generally hold the faith that crushed oats are not so suitable as whole oats for horses that are required to be in hard condition and to do work at a fast pace.—Indiana Times.

CORN OR CORN MEAL FOR HOGS.

A careful line of experiments has just been completed at the Wisconsin Station to decide on the relative value of shelled corn and corn meal for fattening pigs. It was found that the corn meal was something better, not always enough better as a fattening food to pay for cost of grinding. The higher the price of corn, the greater the saving through grinding, since cost of grinding becomes smaller relatively as the price of grain advances. Thus, with corn at twenty-five cents a bushel, the saving from grinding was only 1-2 cents, but the corn at seventy-five cents a bushel the saving from grinding was 4-1/2

cents per bushel. The corn meal produced a somewhat quicker maturity than whole corn. The pigs eat more of the meal and make somewhat larger daily gains. It is suggested that corn meal could be used to good advantage in finishing off a lot of hogs which were at first fed shelled corn.—American Cultivator.

DON'T SELL THE GRAIN.

The experience of farmers in Ohio, Indiana and sections of Illinois should emphasize the importance of keeping stock on our farms in order to keep up soil fertility. It is stated that farms in Ohio began to decline about 30 years ago, and the next census showed that live stock was declining in the state at a very rapid rate. What has been the result? Look at the yields of wheat and other small grains. They tell the story of reduced soils better than anything else. Besides this, farmers in Ohio are paying out more than \$2,000,000 a year for commercial fertilizers. What is true of Ohio is true of parts of Indiana and southern Illinois. Under our system of cropping there is no way under the sun to keep up our soils, without buying fertilizers, or by feeding the crops grown upon the farm. The growing of cow peas in southern Illinois and feeding more live stock is helping matters there. And since the alarm has been sounded thousands of farmers are turning their fields to clover and alfalfa and are filling up their pastures again with live stock.—Indiana Farmer.

HAY FOR YOUNG STOCK.

On most farms there is usually a field that will produce the finest quality of hay. Frequently this is an upland piece of clover, which has not grown so rank as the bottom fields, and on account of the lighter crop it is handled better and cured out nicer. A very sensible stockman tells me he always saves a crop of this kind for his young stock, and he uses extra care to cut it at just the right stage, and cure it nice and green. This hay is not so woody as the heavier growth, and it is not near so apt to mould or become musty. Young animals need something during the winter to tempt them, and nothing will do it like nice, sweet-smelling clover hay when the leaves and not big coarse stems, form the bulk of the crop. Just for the calves' sake, take some extra pains in laying in the winter store of clover.—Indiana Farmer.

HOW TO GET CLEAN MILK.

A New York producer of certified milk gives these requirements for the production of high-grade milk: Clean stables, a healthy herd and careful, cleanly men. His cows are always fed after milking. Just before the milking they are brushed and the floor and walls of the stable are sprayed. A man with warm water and towels then washes the sides and udders of the cattle. A second man repeats the operation, after which the cows are milked into cans covered with sterilized cheese cloth covers and the milk immediately removed from the stable to the cooling room, after which it is bottled. This dairyman gets twelve cents a quart for his milk and is thus well paid for the extra care and expense involved in its sanitary production.—Farmer's Guide.

KEEP THE COW QUIET.

Above all things a cow should be kept in a quiet, contented frame of mind. Anything and everything that in any way disturbs her—loud talk, a stranger in the stable, milking by a new hand—any and all of these have a tendency to diminish the milk yield and anything that does this is surely not favorable to economic milk production.—Weekly Witness.

Marine Monster of 1800.

"When I saw our latest leviathan warship, the Indomitable, launched at Glasgow the other day," writes a correspondent, "I could not help wondering what our forefathers of a century ago would have thought of her. In 1800 a leading naval authority wrote: 'The size of our ships seems now to have reached its ultimatum. . . . The French, indeed, have lately built a ship of most extraordinary size, 172 feet keel, 55 feet 9 inches by the beam, tonnage about 2,350 tons; but she is pronounced to be entirely unfit for service.' And yet this marine monster of 1800, whose size made her so unwieldy that she had never been out of harbor, was but a third as long as our latest cruiser, little more than two-thirds the width, and a sixth of the tonnage—in fact, she was relatively so small that she might easily, one would think, have been carried on the Indomitable's deck. Although a fifty-acre forest had provided her timbers, and it had taken 200 shipwrights a year to build her, her total cost was less than one-tenth that of her successor of today."—Westminster Gazette.

A Florida Shark Story.

A tarpon pursued by a shark near Garden Key in one of its tremendous leaps fell across a skiff containing two fishermen who were so busily engaged with a net that they did not notice its approach. The skiff broke in two, the fishermen became entangled in the net and the shark took a huge bite out of the side of one of them, Belton Larkin, cutting his body nearly in two. It is thought the shark mistook Larkin's body for the tarpon it was in pursuit of, for sharks in these waters have never been known to attack a man.—Punta Gorda Herald.

IS MARS INHABITED?

SPECULATION REVIVED BY AN ASTRONOMICAL OCCURRENCE.

Better Reasons For Believing It is the Home of Intelligent Beings Than Exists With Reference to Mercury, Venus, Jupiter and Saturn.

Of the eight planets which go circling around the sun Mars is in some respects the most interesting. It is very small, having a diameter not more than half as great as the earth's and only twice that of the moon. However, while the case is far from being proved, there is better reason to suspect that it is the home of intelligent beings, not very different from man, than can be presented for holding such a theory regarding any other member of the sun's family except, of course, the earth. Next to nothing can be seen on the surface of Mercury and Venus. Jupiter and Saturn have their curious belts and other markings, but astrologers fancy that those two bodies are yet too hot to sustain life. Neptune and Uranus are not only far away but afford no sign on which any safe judgment can be based. Now, the orbit of Mars lies next outside that of the earth, and the planet is a next door neighbor, so to speak. In the next place, telescopic examination reveals many curious features which cannot be discovered on the other planets. In some measure, no doubt, this is because such atmosphere as exists on Mars—and there seems to be a little—is practically unclouded. The differences in color are largely explained now on the theory that some surfaces represent bare rock or sandy desert. It ought to be added that the boundaries of adjacent tracts are often faint and are indicated by only feeble changes of tint. In drawing their charts of Mars, astronomers unconsciously exaggerate these contrasts, which are often nothing more than a shading from golden to pink or brown or violet, or from one to some other out of a dozen grays. It repeatedly happens, too, that a tint noticed in a particular locality at one opposition is not always the same two years later.

It remains now to describe a special class of markings the nature of which is still a mystery. There are grayish lines, usually narrow and straight, but some having a greater breadth and curious crooks. Most of them traverse the yellowish part of the Martian surface, but it has been observed within the last ten or twelve years that a few extend into the gray regions. It is this last mentioned circumstance, chiefly, which shook faith in the notion that the so-called seas were bodies of water. By far the most conspicuous of the markings looks like an elephant's trunk or the tapering outlet pipe of a balloon. This named "Nilosyrtris," is about one hundred and forty miles wide most of the way. The majority of the others range from thirty to seventy miles in width. A few of the large streaks were observed by Daves, Proctor and other astronomers between 1864 and 1875. On the supposition that they might indicate streams of water they were sometimes called canals. An Italian, Schiaparelli (pronounced Skee-apparelli) devoted special study to them at the oppositions of 1877, 1879 and 1890-91, and he added many new lines (mostly fine ones) to the previously existing lines. It is one of his charts (twenty years or more old) which is here reproduced. Much detailed information about these lines was given to the world by Schiaparelli, and in 1884 he made the startling announcement that occasionally the canals were doubled. Up to the present time at least 300 or 400 canals have been reported by various observers, though they are not all visible at once.

Various interpretations have been put on these wonderful lines. Schiaparelli, Flammarion and others once inclined to believe that they were artificial channels, containing water, though the distinguished Italian afterward remarked that he was doubtful, and hence used the word "canal" merely from habit and convenience. The absurdity of canals from thirty to one hundred and fifty miles wide discredited the theory, too, for a while. A Boston astronomer, Percival Lowell, however, hit upon a more plausible notion. He fancied, and now confidently believes, that these grayish black markings which come and go, indicate vegetation made possible by irrigation. He thinks that the belts represent foliage, but that the foliage is made possible only by an elaborate system of small channels, radiating from a trunk canal which is itself invisible. The changes in distinctness which Schiaparelli noted, Lowell explains by the succession of seasons which shut off and restore the water supply. The lines, it is admitted, are more clearly visible in spring and summer than in winter. Mr. Lowell is a firm believer, also, in the genuineness of the reputed doubling of the lines. Many astronomers hesitate to go so far, and prefer to express no opinion on the nature of the lines. A few are outspoken on their skepticism about the existence of the finer ones and the phenomenon of doubling, regarding most of the stories on the subject a mere result of some sort of optical delusion.

To get around any suggestion of that sort, Mr. Lowell undertook to photograph Mars two years ago at his private observatory in Arizona. This year he sent a party to South America with a powerful camera on a similar mission. A few days ago he received a telegram reporting that some of the sort had already been

done. Until it is known how many canals have been thus depicted, whether the narrow ones as well as the wide ones have been recorded, and whether any evidence of duplication has been thus depicted, whether the narrow ones as well as the wide ones have been recorded, and whether any evidence of duplication has been secured, no opinion can be expressed safely. If no clue to the nature of these lines is obtained, however, light on their genuineness now seem to be assured. The full report of the photographers will be awaited with eagerness.

RABBIT SCALPS IN TRADE.

In Western Kansas They Are Exchanged for Groceries.

Did you ever hear of rabbit scalps being rated as an article of commerce or as a medium of exchange in the same manner as eggs and butter? Out in Trego County, Kan., the country seat of which is Wakeeney, the merchants pay five cents each for rabbit scalps, no matter whether the unfortunate "bunny" was full grown or not. W. J. Williams, who is the proprietor of a grocery store in Wakeeney, bought 2,840 scalps during the months of March, April and May this year. John Keraus, another merchant of the same place, bought 2,700 scalps, while no merchant in the little town paid for less than 500 scalps.

The farmers and punchmen bring rabbit scalps to the county stores along with eggs and butter. The grocer accepts and counts them with no more ado than if they were so many eggs. A few years ago Trego County, in the hope of exterminating the troublesome jackrabbits, decided to pay a bounty of five cents for rabbit scalps, the money to be paid whenever the scalps were presented at the County Treasurer's office. Soon after men who had never before been seen in Wakeeney came to the Court House with big sacks of scalps. Finally the County Commissioners grew suspicious and it eventually developed that certain residents of neighboring counties were taking advantage of Trego's bounty law and were bringing scalps from as far away as fifty miles.

To discourage this practice the county decided to allow payment for scalps not more often than every three months. Three months was a long time to wait. The hunters became impatient at the long delay. It remained for the merchants to solve the difficulty. Accordingly it was announced through the columns of the weekly papers that rabbit scalps would be taken at the grocery stores in exchange for merchandise, provided the owner of the scalps would give his word that they were taken from rabbits killed in Trego County.

The plan proved a success. Instead of the farmers making a weekly trip to the Court House the merchants reported every three months at the commissioners' office and the bills were allowed. During the months of March, April and May the total amount of bills allowed by the commissioners for rabbit scalps was \$568. In other words Trego County killed 3,300 rabbits during the three months.—Kansas City Star.

Magnetic Umbrellas.

At the Royal Institution recently Prof. Silvanus P. Thompson, continuing his course of addresses upon "Studies in Magnetism," said that most umbrellas of modern make were very magnetic. A person standing outside the shop window of an optician and holding such an umbrella would see the needles of the compass begin to move. Not so many of the old horse-shoe or Sheffield magnets were made now as formerly. At one time, before the opening of the Suez Canal, such magnets were in great demand by tea dealers, who used them to rake about with in chests of tea with the object of extracting any odd pieces of iron which the "heathen Chinese" might have put in to make up the weight. Bricks, especially of the red variety, were magnetic, and very retentive of their magnetism. Magnetic qualities had been found in some Etruscan vases from Pompeii, Florence, Rome and Naples, dating in manufacture at about 800 B. C.—Engineer.

Beaten.

An old Irishman who kept a fruit stall had some watermelons given to him by a friendly dealer and exposed them for sale among his other goods. A smart American student who was touring the Emerald Isle, wishing to try his wit on the old man, took up one of the melons and said:

"These are small apples you grow over here, my friend. In America we have them at least twice the size."

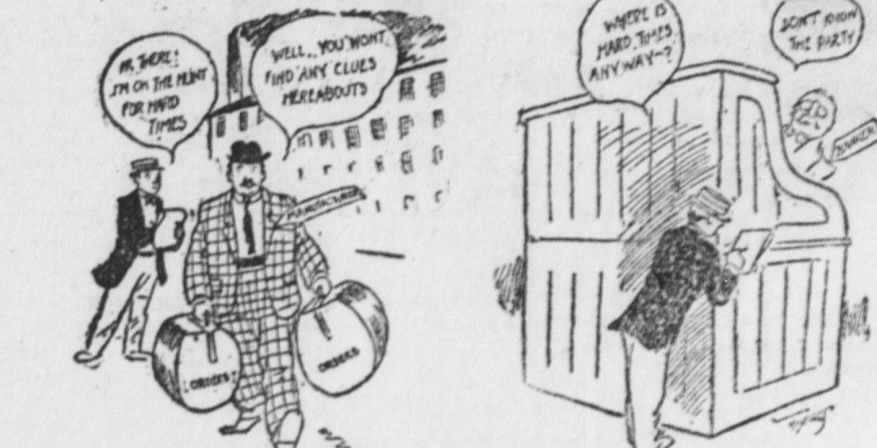
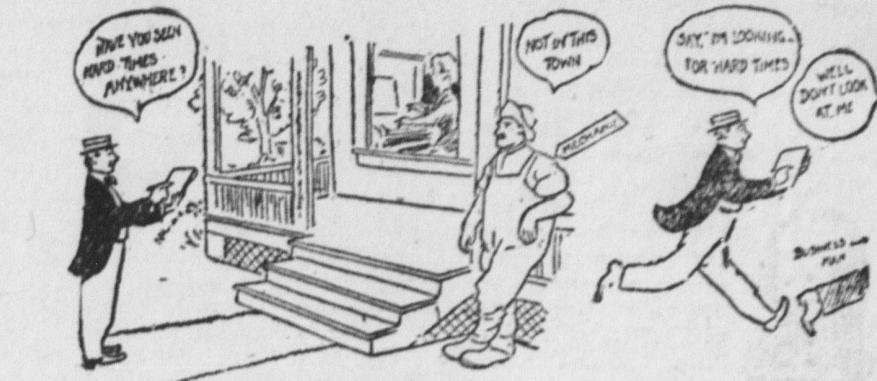
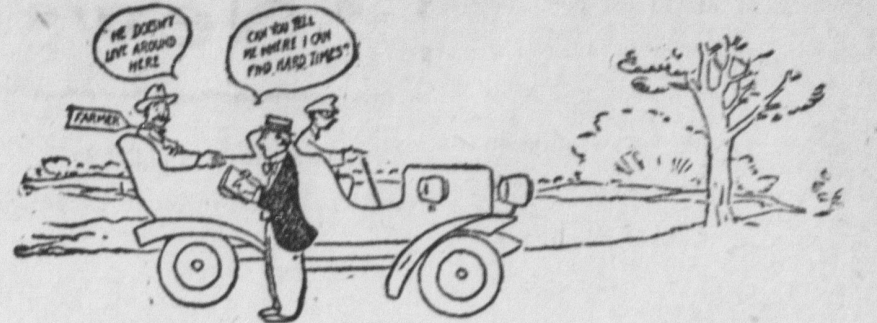
The Irishman slowly removed the pipe he was smoking from between his lips and coolly surveyed the speaker from head to foot for a second or two. Then, in a tone of mingled pity and reproach, he exclaimed:

"Shure, sorr, you must be a stranger in Ireland and know very little about the fruit av our country, whin you can't tell apples from gooseberries!" Chuma.

"Was the deceased in the habit of taking any drugs?" asked an English coroner of the witness. "Oh, yes," said the witness. "What drug did he take?" asked the coroner. "Oh, replied the witness, surprised, thought you said 'grub.'"

The average rent paid for New York city tenements and apartment-houses built within five years amounts to \$146 annually for each person living in them.

A HUNT FOR HARD TIMES.



—Week's cleverest cartoon by Triggs, in the New York Press.

ALTON B. PARKER ASSAILS CENTRALIZATION

Says the Constitution Specifically Defines How Far Government Can Go—At American Bar Convention Judge Tells of Attempt to "Despoil States."

Portland, Me.—At the thirtieth annual meeting of the American Bar Association President Alton B. Parker, of New York, was loudly applauded as he arose to make his annual address. He assailed the centralization theories. Speaking of the activity along the line of regulating corporations, he said in part:

"Now, he who surveys the action of the legislative and executive departments of the State governments during the last few months cannot with truth say that they have been inactive during this period. Nor can he say that the Federal Government has been more active or more drastic in its action than have the States.

"Officials and others have suggested various schemes having for their object the bringing of railroads, other corporations and interests under the exclusive control of the Federal Government. To that end national incorporation has been proposed, as has also a Federal license system.

"The object which their advocates have in view is undoubtedly laudable. But that is not enough, if in the execution of their plans they violate the Federal Constitution and directly lead toward the destruction of our dual government.

"Every power with which it was deemed necessary to endow the National Government was given to it and in the exercise of these it was made supreme. To prevent any possible assertion by the National Government of inherent powers, those assigned to it were carefully and expressly enumerated.

"But to avoid even the possibility of a contrary claim, the Constitution was at once amended by the addition of ten articles—every one of which operated as a restraint upon the National Government. The last one, establishing beyond even the possibility

of cavil that the National Government is limited to the powers specified in the Constitution creating it, reads: 'The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively or to the people.' Other powers have since been granted, and in the future still others may be given, but the Constitution as it now stands forbids the exercise of any powers other than those granted by it. It leaves no room for finding in the language of the Constitution a claim that there are certain unmentioned and inherent powers which the Federal Government may exercise.

"The attempts on the part of the Federal Government to despoil the States of the powers and functions belonging to them will not tend to smoothness in the working of our dual system of government. Already it has had its effect. The indignation of the governing forces of many of the States is already aroused. It is shown in the legislation of the year. It had not a little to do, in my judgment, with the recent conflict of judicial authority in North Carolina."

NOW THE BRITON MAY LEGALLY WED DEAD WIFE'S SISTER

Famous Bill Becomes a Law After Centuries of Legislation—House of Lords Always Objected Until King Edward Came to the Rescue.

London.—Marriage with a deceased wife's sister has finally become legalized in Great Britain.

The House of Lords, by a vote of 98 to 54, passed the oft-defeated bill at its third reading, thereby making such marriages legal.

Throughout the battle in the House of Lords the opposition was headed by Lord Salisbury's relatives, the Cecils. Both Sir Hugh and Robert Cecil used every trick known to parliamentary procedure to prevent a vote from being reached.

The law relieves the matrimonial difficulties of a number of English peers, retrospectively legitimatizing their children.

These marriages, though lawful in the colonies, were void in England. The whole country rejoices in the passage of the bill into law.

King Edward notified the Lords that he thought the bill should pass, and this had much to do with its going through.

The passage of the Deceased Wife's Sister's bill ends a remarkable legislative struggle, dating back to the early history of the church.

Previous to 1533 marriages of consanguinity and affinity were wholly governed by canon law and such marriages from 1533 to 1825 were voidable. In the latter year the Lyndhurst act made past marriages of affinity valid and future marriages void. The House of Commons at first rejected the prohibitory clause as regards marriage with a deceased wife's sister, but afterward accepted it. A royal commission was appointed

Belmont and Ryan Fall Out.

Friends of August Belmont and Thomas F. Ryan practically admitted there was a grave breach between the two financiers, and an effort by the Belmont interest in the Interborough-Metropolitan to throw the Metropolitan Street Railway system of New York City back on Mr. Ryan's hands was predicted.

Money Market Relief.

Secretary of the Treasury Cortelyou announced a new plan for money market relief.

Mrs. Dills Buried Alive.

Mrs. Susan Dills and her sixteen-year-old grandson, James Coyle, were buried alive in a mica mine near Sylva, N. C. They were visiting Mr. Dill's mine, when an excavation occurred, and they were smothered to death.

Haywood's Tour Abandoned.

William D. Haywood, feeling the strain of the trial through which he passed in Boise, Idaho, has given up his proposed tour of the East, and will return to Denver.