

BEES AND BEE KEEPING

APIARY IN COLD WEATHER.

If Hive Entrance Is Too Small Combs Get Mouldy.

With too small an entrance, in a damp climate, you will be sure of mouldy combs and more than the proper amount of dead bees. The trouble becomes aggravated in the course of the winter by the clogging of the entrance with dead bees. Let the full entrance be given as in summer, and see that the dead bees are cleaned from it every few weeks. During heavy storms in winter it frequently happens that hives are entirely buried in snow. While the snow is light and porous air will penetrate it and reach the entrance of the hives, but should the snow become crusty, or ice form at the entrance, the bees would be in danger of suffocating. It is well to have all hives facing southward, so the sun can shine on the entrance of the hive and keep them free from ice. After a heavy fall of snow we always sweep in front of the hives, leaving the snow banked around the other three sides, as it will do no harm there but will help to keep off the prevailing winds. Bees will take an occasional flight during warm days in winter, and sometimes many are seen lying about dead on the snow, but such are generally the old ones that are easily chilled and fall to get back to their hives. Such losses are not serious. Even when the snow is on the ground, and it looks as if it would be a pity for so many bees to fly and roop on this white sheet, we find that it is the colonies which take the most lively flight that winter best, and we have paid particular attention to this fact.

Some people are of the opinion that if we have a cold steady winter, in which the bees remain confined in their hives for several months, there is less danger of the overloading of their bowels with fecal matter which they cannot discharge in the hive, without greatly endangering the life or health of the colony. Diarrhoea is often brought about during the winter season. It is no doubt caused by fermented or extremely thin honey. It has been found that bees located near cider mills will contract the trouble from feeding too much on the apple pomace or can juice. Cold weather dampness, or a sudden change of temperature have been known to bring on the disease. No remedy has been discovered. However, the bees should be kept as warm as possible and the hive should be well wrapped as soon as the outbreak is noticed. During the cider making season, the pomace should be removed and fed to the hogs or disposed of so that the bees cannot partake of it.

During the winter months the bees are huddled close together in a compact cluster, the interior of which is at a normal temperature, while the space outside of it may be even below freezing. As the season advances, and the weather gets warmer, the cluster is brought in, but all the work done is only inside of the cluster, as the temperature is too low outside of it to admit of anything to be done.—F. G. Herman.

A Winter Precaution.

The beehive should face the south to prevent the entrance of north winds and cold. Yet in very warm winter days the sun may so heat up the front of the hive as to call the bees out into the open air when the temperature is really too low. In this way many bees are sometimes lost. A wide board placed in front of the hive will help to ward off undue heat and make the situation less tempting to flight.

Alfalfa Good for Bees.

Since the coming of Alfalfa, any section of the country where it is grown to good advantage is well adapted to bee keeping. Bee keepers say that each colony ought to average from \$2.00 to \$5.00 worth of honey every year besides the swarms which come off.

Those Who Succeed Best.

Those who are in the bee business because there is money in it are not as apt to succeed as those who are in it also because they are fond of bees and their care. It takes a fondness for a business to obtain its best success.

Best Honey Districts.

Some localities are very much better for honey than others. Southern California and Southwestern Texas are among the best countries in the world. Intelligence, industry and a good location are necessary to the best results.

There are still some who argue that the most money for them is in old ideas, old methods, and common bees. They regard the new as too expensive. The best bee keepers, and those who make the most money use up-to-date methods.

Persons of irregular habits, afraid of too much work, careless, or unkind, would better not take up the bee business, or handling live things of any kind.

Let no man undertake bee keeping thinking that it is an easy task. Bee keeping is like growing a crop. It takes care and labor to make it succeed.

HOW TRACKS ARE LEVELLED.

Unique Methods Used to Make Travelers Comfortable.

Curiosity is often displayed by travelers over the method employed in making mile after mile of trackage so level that scarcely an undulation can be felt as the whizzing train reels off the laps. This levelness is maintained by the "whitewash" car.

The "whitewash" car, is an ordinary vehicle fitted out with a sort of whitewash machine. As the cars run over the rails at a moderate gait, the developed sense of the division officials notes any inequalities, and at each one a valve is pressed, where at a dash of whitewash falls on the tracks at the points where later the working gangs get busy to make things even.

This homely "whitewash" car is giving way rapidly, however, to a more modern and scientific arrangement in the way of a handsome coach elegantly fitted out with many comforts, and in which is to be found a delicate instrument. This latter is so constructed that it registers all unevenness in the tracks on paper, which has indicated on it the mileage and names of stations along the way, so that when a run is completed it will be shown just where repairing needs to be done. The indicating sheet is sent to the proper department heads of the company, and by them the work of making the roadbed level is prosecuted.

A Punctual Pensioner.

A gentleman one day noticed a hungry-looking dog prowling round his yard, and struck by the poor brute's famished appearance, he fetched a large bone and by no means a bare one, which he threw to the four-footed vagabond. It was exactly twelve o'clock when the bone was given and carried off.

The giver thought no more of the matter, but evidently the dog did, for on the following day at the same hour he made his appearance, with an expectant look about him which told that he hoped for a further contribution.

Amused at the effort to establish himself as an out-pensioner, and desirous of finding out whether the dog's arrival at this particular time was a mere chance, the gentleman gave him a second supply of food.

Punctual to time, the dog presented himself on the third, looking even more confident than before. He was duly fed, and for a great length of time this self-elected pensioner made his daily appearance at his patron's door with notable punctuality.

One is led to wonder whether the dog may have regulated his own movements by observing those of some individual in going to and from his work, and whether when the four-footed animal was a few minutes late it might be because the biped was unpunctual or his clock slow.

Where Swallows Go.

The swallows all spend the winter in Central America and the south part of Mexico. They appear in the southern states as early as the middle of February, but seldom get as far north as New England until the month of May. The robins winter in the southern states and in northern Mexico. They are to be seen in flocks the winter through in the gulf states.

World's Sweetest Plant.

An Austrian journal tells of a plant called Parkid biglobosa, recently discovered in Africa, which produces a fruit containing 20 per cent. reducing sugar, which puts it in the first rank of sugar-producing plants.

Mustard.

Mustard is the oldest of condiments, the Egyptians regarding it as an aid to digestion. The ancients ate it freely, and it was sold by peddlers in Solomon's time. The Normans and Anglo-Saxons in the earliest times never went to war without an ample supply of prepared mustard, they considered it both food and medicine. The plant seems to thrive in all parts of the world, and is eaten by every civilized nation and many heathen tribes, either as a spring salad, for which the young leaves are delicious, as a seasoning prepared from the ground seed.

NO BUTTER TRUST POSSIBLE.

Every time of high prices for butter is the occasion of a lot of silly talk in the newspapers about a butter trust. No one can organize a trust in such a product for the reason that every farmer is able to begin competition and start making butter whenever he thinks it may pay him to do so. The real cause of nine-tenths of the advance in the butter price is the higher cost of grain. Dairywomen, instead of talking of a trust, are trying hard to convince themselves that there is still a little profit in the business after paying grain bills, and most of them, if asked, would express the opinion that the margin between cost and selling price is less now than in other times when butter was selling for less money per pound.

Grass Raincoats.

The summers in Mexico are too hot for the wearing of rubber garments to shed rain, and closely woven coats of grass are a fair substitute. Some of these have a hood attached.

Fainting.

Of the 1,001 young women who fainted last year 987 fell into the arms of men, two fell on the floor and one into a water butt.—Life.

DAIRY AND CREAMERY

MILKING MACHINE ECONOMY.

Method By Which It is Made a Fixture in Barn.

A prominent dairyman gives this as his method of installing milking machines in his barns: Instead of placing expensive piping through eighty feet of stall room, with connections at each cow stall, he has arranged something entirely different. He has a special stall or milking room to accommodate four cows, two animals standing with heads to the right and two with heads to the left. This necessitates only a short piping system. The milking machine is thus practically a fixture at one spot, and the apparatus, tubes, receiving can, milk cups, etc., can be fixed at one point. This makes it unnecessary to shift the appliances so frequently.

The cows in this barn have been trained to go to the milking machine instead of taking the milking machine to the cows. The animals are taken in turn. They are assembled near by at milking time, and four cows are admitted to the room at a time. They know they are to be fed in this certain place and are always ready for it. As soon as they take their places they are fastened, the milk cups adjusted to the teats, and the cows are milked while eat-



LATEST TYPE OF MACHINE MILKER.

The whole job is completed in ten minutes and another quartet of cows brought up to take their places. Among other advantages this means little or no manure at that place, also greater ease and facility in adjusting machines, and is considered by this progressive dairyman simple and better in every way.

Dairy Notes.

Never use musty or dirty litter. We are often inclined to mistake lack of "gumption" for "hard luck." Keep the stable and dairy room in good condition, fresh air, dry and clean. The imitation gives just as good satisfaction as the genuine as long as a difference is not known. Good judgment is of more value than either knowledge or skill, although each is desirable. When calves are fed skim milk it should be warmed to blood heat before giving or it may cause scours.

If every person were to receive credit for intentions instead of actions, many a one would be judged differently than under the present plan. We must conclude that the sluggish spirited, dull eyed man must have a poor chance in this world when we remember that even the old cow must have a bright eye and a highly strung nervous system in order to be a success.

Making a Poor Cow.

Physical comfort means much to all sensitive creatures. With shelter from the elements, hunger and thirst satisfied, no aggravation from flies or other insect pests and in no fear of man or other creatures, the cow stands some chance of showing what she is good for, but let the sun and rain by turns beat on her, or the cold make her shiver, with scant feed and water, and with a dog to drive her to and from the fields, and a man to yell at and beat her, no wonder she becomes only a poor cow, one to disappoint her owner and to excite only the pity of the compassionate.

GONE OUT!

The poor little black and tan dogs! How they have faded into obscurity, unhonored and unsung. At one time they were largely the fashion and great ladies fondled them and were proud in their possession. Now they have been superseded by other varieties. The other day we patted one of these pathetic creatures on the head and he returned our caress with a deprecating wag of his tail, as to say that we didn't quite know what we were doing, but he thanked us all the same. And yet of all the dogs there, there is none more intelligent than the black and tan.

Abnormal Twilights.

Twilight, which is normally due to the refraction of the sun's light by the atmosphere, is occasionally modified by other natural causes. Rosy glows in the west after sunset are reported to be particularly common in the vicinity of Bordeaux, France. These are not the usual sunset glows, but appear in the sky 45 degrees above the sun and are supposed to be due to reflection from high clouds too thin to be seen in ordinary light. The same invisible clouds may also cause abnormal prolongation of twilight, as on the first day of last July in this same region, where a watch could be easily read up to four minutes of 10 p. m., whereas on the following night it could be read only a quarter past nine, a difference of 41 minutes. Owing to the presence of the thin clouds above described, these long twilights are of use to astronomers as an indication that the night will not be favorable for astronomical observation.

France Fears the Tromblon.

Every traveler knows that there are certain restrictions upon the introduction of arms into foreign countries. Among the weapons which it is forbidden to take into France is the "tromblon," which is expressly mentioned in the Bengal code as a weapon the carrying and sale of which is not allowed. And yet the "tromblon" is not a firearm which is commonly used nowadays, for it is nothing else than the blunderbuss, a weapon which old caricatures show to have been carried by the guards of coaches and to have been hung over his fireplace by John Bull at the time of the scare of a Napoleonic invasion 100 years ago. The blunderbuss had a flint lock, a short barrel, and a muzzle like a trumpet, the bell mouth being designed to scatter the slugs with which the primitive piece was charged. Anyone who buys one at an old curiosity shop had better take care how he introduces it into France, for the penalty for doing so is a fine of 100 francs.

Domestic Slavery in China.

A species of domestic slavery exists in China to a considerable extent. Oftentimes Chinese parents, poverty-stricken, sell their girls to wealthy families. The prices range from ten to one hundred dollars, and if the girl be very good looking larger amounts may be given, as the buyer knows that when she marries she will bring in a larger number of wedding presents, which oftentimes will pay the purchase price three-fold, besides the work she has done. Of course the girl's servitude ceases when she marries. Theoretically there are no slaves in Hong Kong, which is British territory, but practically, there are thousands of them following the sedan chairs of their mistresses or watching over little Chinese babies.

The Barbed Wire Fence.

"The luckiest invention in history," said a patent official, "was that of barbed wire. It came about by accident."

Isaac L. Ellwood was the inventor of barbed wire. In his youth he lived in De Kalb, Ill., and having a neighbor whose pigs trespassed on his garden, he put up one day a wire fence of his own make. This fence had barbs and points on it; it was queer and ugly, but it kept out the pigs.

"It was a real barbed wire fence, the first in the world, and there was millions of money in it, but young Ellwood and his friends laughed at its freak appearance."

"One day two strangers saw this fence, perceived how well it kept out the pigs, realized how cheap it was, realized, in a word, its value, and ordered several tons of it from Ellwood. Furthermore, they contracted to sell for a term of years all the barbed wire he could produce."

"Ellwood borrowed \$1,000 and set up a little factory. A few years later on he had paid back that loan, and was worth a small matter of \$15,000, 000 besides."—The Commercial.

WASTE ON THE FARM.

From authoritative reports by government officials it appears that some 2,687,021 cattle die in the United States annually from disease and exposure, most of them from neglect. From the same source it is also ascertained that the loss of sheep from the same causes is as great.

These figures only serve to show what a wasteful people we are. One of the excuses the beef trust makes for high prices of provisions is the enormous death rate of live stock on the range and on the farm, most of it due to pure triflingness of the herdsmen and the grazer. Indeed, the losses for highly neglect and exposure greatly exceed the losses by disease.

It would be impossible to estimate the waste of farm products after they mature in the field, but it is enormous—some of it traceable to thriftless husbandry or, in plain speeches downright laziness. One source of waste is imperfect cultivation, for millions of farmers persist in half cultivation, of large areas when they would make more by proper tillage of fewer acres. Then there is immense waste in the disregard of intelligent rotation of crops. This is the worst sort of waste, for it means devastation of soils that require years of provident tillage to replace. All over the East are abandoned farms that would to-day be gardens if they had been given intelligent cultivation. That farmer is not fit for his vocation who does not increase the fertility of his soil every year he cultivates it.

THE INCORPORATION OF TRUSTS.

In a sane argument for the Federal incorporation of Trusts, in the Atlantic, the author says this does not necessarily mean either a federal license or federal regulation for interstate corporations; it does not mean an extension of federal government, though it may mean an exercise of the restrictive power of the federal Congress. Federal government is not necessary if the federal power can be used to attack directly and logically the real evil, the abused power of one state to license an irresponsible corporation to do business in other states. The simplest course is sometimes so simple and so direct that, in our confusion or timidity in an important matter, we try to walk around it. The remedial federal law should be a simple and effective attack on the actual abuse; it should be a self-operating and effective prohibiting law, stating in detail the conditions of incorporation, management, and governing laws, necessary to enable a corporation to depart from the state of its birth to engage in interstate commerce, prescribing adequate penalties and making void and unenforceable by a corporation any contract made in violation of its provisions.

S. HOLMES, JR.

An Episode That Made Him Despair of His Friend's Ability.

"His! His!" said Sherlock Holmes, Jr. "What is it, Sherl?" asked his friend the doctor. "Yonder man with the ruddy complexion and the look of satisfaction on his countenance—do you see him?" "Yes. A friend of yours?" "I never saw him before. He has been spending his vacation in Canada."

Swedish Engineer's Kite.

A strange kite has been devised by a Swedish engineer. It is made to fly under water. It is made of light canvas adjusted to a light but strong metal frame, and in shape is not dissimilar to the aerial kite except that it is made in two sections, the lower and smaller one depending from the upper, with which it is connected by a sort of coupling. The object sought by the engineer is to provide ships with an ever ready automatic guard or watch that will give instant alarm if the vessel enters shoal waters and is approaching a spot where the depth is not sufficient or safety. The under water kite is fastened to a thin wire cable attached to a winch on deck. The purpose of the water kite is to float beneath or beside the ship at a depth that is sufficient to insure safety. If at any time, day or night, the lower section of the kite strikes bottom a device instantly releases the coupling with which it is secured to the upper section, and an alarm bell is sounded on the deck of the endangered vessel. Precautions can at once be taken to secure its safety. The kite meanwhile is drawn up, readjusted and thrown overboard to maintain its faithful watch.

Is Night Air Harmful?

The old theory that night air is injurious has been attacked recently by a lecturer at an institute of hygiene in London, who declares that it is purer and far more beneficial than the air breathed during the day. In the course of his lecture he strongly advised walking during the night instead of braving the heat of the day, and deeply regretted that children could not be taken out at midnight.

Sweet Enough.

Tom—"And when you proposed she gave you a sweet answer?" Dick—"She did, indeed."

On To Themselves.

"Pa," asked little Willie, looking up from his book, "what's a 'mis-anthro-pist'?"

New Definition.

A priest was describing heaven to a class of boys. He ended by saying, "You may describe heaven in two words—'eternal bliss.' Now can any boy describe hell to me in two words?"

Saved Her.

Wife (during the spat)—I don't believe you ever did a charitable act in your life. Husband—I did one, at least, that I have lived to regret.

Wife—Indeed! What was it pray?

Husband—I saved you from dying an old maid.

SILENCED THE ROWDY.

Happy Retort of a Politician Which Won Him a Majority.

Judge Emory Speer, who presides over the United States Circuit and District Courts for the Southern District of Georgia, and whose decisions in peonage cases have recently attracted wide attention throughout the country, is the possessor of a nimble and facile wit. In earlier days, before he had attained the eminence, Judge Speer was a politician and a power on the stump.

Shortly after reconstruction he ran against Allen D. Chandler for Congress. It was his wit, his good humor, and his unflinching courage that carried him through the campaign without a serious difference, and finally brought him to victory.

On one occasion when the young candidate was addressing a very democratic and hostile audience, a brawny countryman was observed fighting his way through the crowd to the speaker's rostrum. It was evident that he had spent the preceding night with John Barleycorn, for his clothes were rumpled, his hair dishevelled, and his face of a fiery red that rivalled the noonday sun in brilliancy. Shaking a belligerent fist under the nose of the orator, he exclaimed:

"Sir, you are a demagogue!" The crowd howled, but Speer was not disturbed. He waited for the noise to subside and then, with a smile and in a tone of entire good humor rejoined:

"And you, sir, if you would wrap a few wisps of straw about you, would be a demijohn."

The delighted audience roared with appreciative laughter and the discomfited patriot slunk away. It is said that in no voting precinct of the district was Speer's majority larger than that in which this happy retort was made.

She Was Sympathetic.

Dora was stupid, but she had one redeeming quality; she was sympathetic. At any rate, that was what the old boarders told the woman who writes, and it was what she learned for herself on the fifth day of her sojourn in the boarding house. For four consecutive mornings Dora had seen the woman scribbling away at a furious pace. Finally even her dormant faculties were impressed by such literary activity.

"My," she said, admiringly, "but you must have brains." The woman laid down her pencil. "Dora," she said, wearily, "I haven't an ounce of brains."

Clearly Dora's disillusionment was painful, but her sympathetic nature sustained her. "No?" she said. "Well, you need not mind me. I ain't very smart myself."

Signs on the Links.

An Irishman was walking along a road, says the Philadelphia Public Ledger, when he was suddenly struck between the shoulders by a golf ball. The force of the blow almost knocked him down. When he recovered he observed a golfer running toward him. "Are you hurt?" said the player. "Why didn't you get out of the way?" "An' why should I get out of the way?" said Pat. "I didn't know there were any assassins around here."

Spiritual.

In making a sharp turn, the rear end of a street car struck an express wagon laden with jugs of whisky. Nearly all the jugs were precipitated to the pavement, with the natural disastrous result. The driver of the wagon alighted, and, pointing to the pile of demolished earthenware, said to a bystander, "That's hell, ain't it?"

The spectator, who happened to be a minister, replied, "Well, my friend, I don't know that I would say that, but's at least the abode of departed spirits."

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