

FOR THE FARMER.

Swarming, and How to Manage It.

In the writer's apiary two large tin pails filled with water are always kept near the shop door, with a fountain pump hanging over them; and if a swarm shows any disposition to leave, or is slow in clustering when other swarms are expected, it receives such a sprinkling that it soon "hangs itself up to dry." With such a pump and plenty of water it is next to impossible for a swarm to abscond. The implement is also useful to prevent uniting or clustering of swarms issuing at the same time. Near the tin pails stand two splint clothes baskets, lined with cotton cloth, and each basket is furnished with a burlap cover stitched to one side of it. As soon as a swarm has clustered it is shaken into one of these baskets, the cover flopped over, and if another swarm or something else demands immediate attention the basket and its contents can be set to one side, to be disposed of at leisure.

After seeing the ease with which bees can be managed when allowed to swarm naturally, the energy with which they work, and the excellent results obtained, the writer is decidedly opposed to artificial swarming—and also to queens with clipped wings. In the first place, when the bees swarm, the queen has to be found and caged. The bees roam around a long time, and sometimes finally cluster. If another swarm comes out they are certain to unite with it. When the bees do return they often go piling into the wrong hive, perhaps hives; and if they do catch on to the proper one, instead of going in they often cluster all over its outside. Sometimes, after the queen has been allowed to run in she comes out again then of course the bees will follow her. In my experience a swarm having an unclipped queen can be hived and be at work in that "whooping," "zipping" go-ahead style, in just about the same time that it takes a swarm with a clipped queen to make up its mind, sullenly and doggedly, to go back home.—*American Agriculturist.*

Plantain and Other Weeds.

As to destroying the weeds after they are once on the farm—there are weeds and weeds, and a knowledge of their nature will be a great aid in the warfare against them. Like other plants, they are annual, biennial, or perennial. Annual weeds come up, and die the first season, and that is the end of them. But before they depart, they make abundant provision for a succession, by producing a multitude of seeds to carry on the work. The earlier such weeds are destroyed, the better, as some perfect their seeds when quite small. The cultivation of crops that must be frequently worked by hand or horse implements, is the most ready way of getting rid of them. Biennial and perennial weeds the first year from sowing, prepare to produce seeds the next year, and are usually not conspicuous the first season, there being only a tuft of leaves lying close to the ground, looking innocent, but preparing for mischief, by laying in provisions for an active growth the next year. The biennial, the second year, shoots up a flower stalk, perfects its seeds, and dies. The perennial shoots up a flower stalk, perfects its seeds and don't die, but on the contrary lays up in its roots provisions for a more active campaign the third year, and so on continuously. When such weeds are established, their spread should be prevented by cutting off their seed-stalks, or rather flower-stalks before seeds are formed. If the flower-stalks of a biennial weed are cut away, the plant will die sooner or later, and give no further trouble. Not so the perennial weeds, the measures for their extermination must differ with the nature of the plants and their numbers. In some cases, pulling or digging up the roots will be cheapest; in others, the constant cutting of the leaves as soon and as often as they appear at the surface of the ground, will answer. Again, it may be best to smother the weeds with a heavy growth of buckwheat, or the Southern Cow Pea. This last makes a remarkably dense mat of vines and foliage, under which nothing can live. We have thus indicated the general methods to be followed in the destruction of weeds. Those persons will be most successful in applying them who acquaint themselves with the plants known as weeds, and are able to recognize them at every stage, and who consider their habit of growth in undertaking their destruction. Every farmer should recollect that a sharp hoe properly applied to any weed in its youth, will avoid much trouble in future.—*American Agriculturist.*

Kitchen and Market Garden.

Success in the garden largely depends upon having good seeds and sowing them in the right time. Do not depend on seeds of doubtful vitality, but test them beforehand. Count out twenty seeds and sow them in a cup or other vessel of soil, and note what share comes up. The seeds of tender vegetables should not be sown until the proper time to plant corn. In raising vegetables for market sow those kinds that are popular in the locality.

Plants in hot-beds should be hardened off gradually to prepare them for the open air. Hot-beds at this season need close attention. If the sashes are left closed a short time, the hot sun will destroy the plants and undo the work of weeks. In sowing seeds success often depends upon bringing the soil in close contact with them. Some gardeners tread down the soil over the seeds with the feet.

Asparagus is a crop well suited to farmers, always in demand and the market rarely overstocked. If not sold at once it will keep several days. Sow seeds to raise plants with which to set out a field next year. Prepare the soil as for a root crop, mark out drills fifteen inches apart and sow the seeds rather thinly, covering an inch deep. When well up keep clean by use of the hoe and thin with the hoe, leaving the plants as far apart as the width of its blade. If they have good soil and good cultivation the plants will, in one season, grow large enough to set out next Spring.—*American Agriculturist.*

The Berry Patch.

Former notes upon the cultivation of the small fruits, have been given from time to time. Perhaps the very persons for whom they are especially intended—the farmers, thinking they have no fruit garden, have passed them by. By fruit garden, we mean essentially a berry patch. As farmers more than most others deprive themselves of the small fruits, which they might and should have in abundance, we have endeavored to show that their culture is a

simple matter. Let the determination once be made to have an abundance of small fruits and all the rest is easy. To make a beginning, unless some friendly neighbor will furnish plants, there must be a small outlay at the start. If only a few plants of each kind of fruit are procured to begin with, these can be increased very rapidly, indeed some multiply themselves. No investment will bring such a large return in health and family comfort, as that expended for the plants to stock a berry patch. Send to some reputable dealer for his catalogue, make a selection and send the order early. The express or mail will bring the plants in due time. When the plants come, there must be a place ready to receive them. Select the best land that can be found near the house. It is well to have it in sight, as trespassers will be less apt to trouble it. It would be better to have prepared the soil for the patch last fall, but do it now, rather than to postpone the garden for a whole year. Prepare the soil as well as you know how with the means at hand. This means well-rotted manure, and thorough working with the plough and harrow.

Saving the Road Wash.

Every road not on a dead level has more or less debris which has a fertilizing value washed off upon its side. The water itself is valuable, and will make grass wherever it spreads. In a hilly country or one of gentle grades, nearly all this water, and the fertilizing matter it carries, may be turned off at frequent intervals upon the adjoining pastures and meadows. The dust and debris of the highway consists of finely pulverized soil and stone, which contains more or less lime, potash, and other valuable material so minutely divided that water makes it immediately available for plant food. Iron and steel tires, horse and ox shoes, and above all the frost, have been at work upon it all through the winter. Appreciable quantities of manure have been dropped upon it by beasts of burden, and their feet have mixed it with the road dust, and made a nice compost. Its value is seen in the rank growth of grass and briars wherever it lodges. It will pay big wages for all the labor needed to turn this wash off, through culverts or an open ditch, on to the adjoining pastures and mowing land.—*American Agriculturist.*

QUEER ANIMALS.

The Museum of Comparative Zoology at Cambridge has received a crab from Japan that measures, from claw to claw, nearly twelve feet. In some observed by Professor Ward the claws were five feet in length.

Professor Noury, director of the Museum of Natural History at Elkouf, in hunting the grebe, noticed a nesting bird push its floating nest from shore, sitting upon its side and paddling the nursery that contained the eggs, thus conducting it out of danger.

A frog discovered in Germany has an ingenious method of protecting its eggs from birds. They are deposited in a swampy place, and immediately become luminous in the dark, predatory animals avoiding it, thinking it fire. The light of fire-flies has been proved a means of communication between male and female.

A vessel off Para reports falling in with a mass of spiders floating in the air. The rigging and sails were covered with the web, the long threads of which formed the balloon for the tiny aeronauts. For several miles this spider swarm continued, the captain estimating that there were millions, which had undoubtedly been blown from land.

A gigantic jelly-fish stranded at Ceylon weighed over two tons, and at night gave out a light sufficient to read by. In ten days it had evaporated so that it weighed only a few pounds. In specimens of the genus *urela aurita* there is 92.92 per cent. of water, the solid matter forming a small of 1 per cent. In large forms of *Rhigostoms* there is 5 per cent. of solid matter.

Professor Elliot of New York City, is conducting some interesting experiments to test the sensibility or insensibility of insects to pain. A dragon-fly was fastened to a board and its abdomen severed from the rest of its body. The latter was then fed to the insect by piecemeal, which it ate with evident relish, the parts eaten of course dropping out of the severed end. Having eaten its own abdomen, it was served with six spiders and sixty flies, swallowing them all and losing them immediately, evidently suffering no pain.

The forthcoming report of the "Challenger" on deep-sea fishes will contain some remarkable forms new to science. Many are luminous, showing fiery spots upon the head, like the headlight of a locomotive, or along the fins. It is supposed that these are their means of communication. Some of the localities from which they were taken were two or three miles from the surface, where, if a man stood, the pressure would equal that of two obelisks like the one in Central Park piled upon his back. The temperature of the water is just below freezing.

The Population of Russia.

On Jan. 1, 1882, the inhabitants of Russia numbered 91,118,514 living in sixty-three provinces and eleven districts. During the year 1881 there were 4,848,863 births and 2,826,438 deaths registered, the growth of the population being 1,217,425 inhabitants. At this rate the population would rise to a hundred million in 1890, and in sixty to seventy years it would double. At present the population of the empire is ninety-four millions. The growth of population is largest in the southern parts and smallest in the northern, where also the mortality is greatest. It is difficult to say whether this is to be attributed to the climate or the economic conditions of the country. The average of life in Russia is twenty-six years in Europe and thirty-one in Asia. This fact is explained by the enormous mortality of young children. It has been ascertained that sixty per cent. of the children die under the age of five years, which means one and a half million of deaths per annum among young children. It has also been proved that more than half of the male population die before attaining the age of military service. On an average, a person is born in the Russian empire every eight seconds, and a death occurs every eleven seconds. In St. Petersburg a human being passes away every fifteen minutes.

A LIFE ON THE OCEAN WAVE.

Terrible Sufferings of a Shipwrecked Crew—Only One Left to Tell the Tale.

On Feb. 19 the brig A. G. Jewett, loaded with coal and machinery, left Philadelphia bound to Matanzas, Cuba. She was a trim vessel of 371 tons, was under the command of Capt. Joseph Reed, and hailed from Belfast, Me. She had picked up her crew in Philadelphia a few days before sailing. These were the Captain, two mates, six sailors, and a cook.

On the day after setting sail the brig passed the Delaware Breakwater. On Feb. 21 and 22 the weather was foreboding, but the winds favored the vessel's course. During the night of the 22d the brig struck the Gulf Stream. A strong wind, which had been blowing from the south east, turned into a violent gale. The sea rose high and the waves broke over the vessel, which labored terribly. The storm increased in violence, and the gale shifted and came from the south-west. The buffeting of the waves shifted the brig's cargo, and she sprang a leak. The storm was so fierce that the pumps could not be worked with any effect. At 5 1/2 o'clock on the morning of the 23d a heavy sea struck the brig, throwing her on her beam ends. She foundered shortly afterward. Capt. Reed and the cook sank with her.

The two mates and the four seamen swam toward a boat which the waves had torn loose from the vessel, together with a spar to which it had been spliced. The boat was full of water, and would have sunk but for the spar. The men climbed into her, and clung to the gunwales. The waves broke over them again and again. They had no food, water, oars, or sails. At daylight the gale had decreased in violence, but the water was still terribly rough. It became frightfully cold. The men to keep the upper part of their bodies out of the water stood on the boat's seats, still clutching the gunwales, which were the only part of the boat not submerged.

In the afternoon Mr. Clarke, the first mate, said that his strength was leaving him. He could not stand on the seat any longer, and sank down into the water, his body resting on the boat's bottom. For a time he managed to keep his head and shoulders above the gunwales. A succession of chop seas swept over his head, and a little while after he died. His companions, to lighten the boat, threw his body into the sea. Not long after the death of the first mate one of the sailors died from exhaustion. His body had hardly been let over the side of the boat when another sailor loosened his grip on the gunwale and fell back dead. He also was dropped into the water. Only three remained when night came. There was no moon or stars. The flooded boat was tossed high one moment and submerged the next. The night was terrible, and it seemed like a lifetime to the two men who lived to see dawn. The other had died in the darkness.

At noon on Feb. 24, Second Mate James Pratt was the sole survivor of the crew of the brig A. G. Jewett. For nearly two hours longer he was tossed around. He had been in the boat fifty-four hours when he saw the bark Elward Cushing bearing down upon him. He was too weak and numb to make even a signal of distress. The bark was out from Boston and bound for Aspinwall, where Pratt was landed on March 14. He was anxious to return to the United States, but was entirely destitute, all his effects having been lost with the A. G. Jewett. He told his story to the United States Consul at Aspinwall, who sent him home on the Pacific Mail steamship Acaapulco, which arrived in New York recently.

The California "Big Trees."

A correspondent of the *Advance* says:—"The largest tree is the fallen 'Father of the Forest,' with a traceable height of 452 feet, and measuring 112 feet in diameter at its base—a stupendous ruin truly! The interior, a hollow cavity, probably burned out centuries ago, is sufficiently spacious to afford ample room for a couple of mounted horsemen to ride abreast for 200 feet, then dismounting, if so disposed, our cavaliers could ascend a ladder, and through a very respectable knot-hole emerge into the outer world again—by no means a formidable undertaking, as we can cheerfully testify. The noble 'Mother of the Forest,' 327 feet in height, denuded of her bark, and, of course, dead, white and ghost-like, is still standing, though her top limbs are beginning to fall. The bark removed from the poor defrauded 'Mother' was exhibited at the Sydenham Crystal Palace, where it was burned with the partial destruction by fire of that building some years since. In 1853 one of the most imposing of the family group was cut down, occupying five men twenty-five days in performing the herculean work, which was accomplished by using augers, the borings being made toward the centre of the tree. Upon the top of the stump, smoothed and polished, a pavilion had been erected, and the sizeable room enclosed upon festive occasions serves for a dancing hall, and is large enough to accommodate thirty-two 'sets' upon the floor, it is said, at one time.

"The Mariposa Grove, in Mariposa County, is a public domain, having been given by an act of Congress in 1864 to the state of California. It is two miles square, and from its greater area, larger number of trees and the wildness of the locality, was even more impressive to us than the Calaveras Grove. Many of the big trees have been scathed by fires, particularly in this forest, where, as Professor Whitney says, they have evidently swept through again and again, greatly marring its beauty. But amid all these fierce conflicts, though scarred and battered, many of these brave old veterans have sturdily maintained their hold upon life while others have bowed their lofty heads in the dust. There are not a few of these prostrate monarchs here in the Mariposa Grove, in the debris of whose mouldering trunks, shrubs, loveliest wildflowers and soft, velvety mosses spring up, gracefully beautifying all that remains of their former stately majesty and grandeur. Through one of the standing trees—the monster 'Wawona'—the stage road has been made to pass an aperture not quite equal to a similar one cut through the stump of the 'Dead Giant,' in the Tuolumne Grove, through which wooden tunnel our loaded six-horse horse stage-coach was driven in easiest transit."

The truest wisdom is resolute determination.

AMONG OUR EXCHANGES.

The most appropriate pastry for a free lunch counter—sponge cake.

Every fresh trick the professional roller skater adds to his or her repertoire is called a new rinkle.

Registers in the horse cars do not warm the vehicle, but they make it hot for the dishonest conductor.

He—"You made a fool of me when I married you, ma'am." She—"Lor! you always told me you were a self-made man!"

When a bachelor says he is single from choice it makes him made to ask him why the girls made choice of some other fellow.

It ain' allus de silent man dat's de smartes'. De sheep doan make ez much fuss ez de dog, but he ain' got nigh ez much sense.

"No," said the grocer, "Brown's trade doesn't amount to much. A pretty large family; but then, you know, they don't keep a servant."

A New York alderman, being told recently that he was ambiguous, declared that the charge was false, as he had not drunk anything for a year.

"Does your baby kick when you try to put it to sleep?" asked one young married man of another. "No," was the reply, "but I do when I am asked to put it to sleep."

To say that a man with a bad cold in his head is like a musician, because he blows his nasal organ and sounds the loud catarrh, may be a bass joke, but its tenor is certainly funny.

It was so cold in Nevada a few days ago that saloon frequenters had to thaw their whiskey before they could imbibe it, and the operation required so much time that they nearly died of thirst between drinks.

A fashion magazine asks: "What will the coming woman wear?" Mr. Boxford, who is an old bachelor, says that observation teaches him that if she is a fashionable woman she will wear out her husband's patience.

It is declared on good authority that only twenty-four white elephants have been secured in Siam in 1,352 years. Of this number

ber it will be safe to wager that at least fifty will be travelling with American circuses in less than two years.

Scientists who have made minute examination assert that the point of a bee's sting is so fine as to be nearly undistinguishable under the microscope. Under some circumstances the stinger seems as big as a red-hot crowbar.

A young Hungarian woman recently arrived at New York, has been trying to marry three men. Some wicked American has evidently been giving the poor girl some exaggerated pointers on the leap year of her adopted country.

When a young woman trips daintily into the parlor and explains her delayed appearance by remarking that she had been "helping mamma to wipe the dishes," it is pretty hard to refrain from proposing on the spot; but go slow. She may be fooling thee.

An article is going the rounds of the press entitled "The Umbrella in France." That settles it, then. For a while we cherished the hope that we might regain possession of that umbrella, but as it has crossed the ocean to evade us we might as well give it up.

A nicely dressed woman on the street always looks like an angel until she catches her skirt in the hoop of an ash barrel on the sidewalk and tears it, and then—well, the man of well-balanced mind doesn't remain near enough to see just exactly what she does look like.

Mamma (a widow of considerable personal attractions): "I want to tell you something, Tommy. You saw that gentleman talking to grandmamma in the other room. Well, he is going to be your new papa. Mamma's going to marry him." Tommy (who recollected something of the life his old papa used to lead): "D-d-does he know it yet, mamma?"

There was a large boiler of scalding water over a fire in the yard and several black imps playing near it. Suddenly a shrill voice was heard from inside the shanty:—"You, George Washington, keep away from dat ar biler. Directly you is gwine ter upset dat ar biler and scald yourself ter deaf, an' when you is, you'll be de fust one to say, 'Twasn't me, mammy.'"

PETLEY'S

THE LEADING CARPET HOUSE!

Ours is for many reasons the Leading Carpet House

FIRST—Our prices are lower than those of any other house in the city.

SECOND—Our stock is entirely new and consists of this season's goods only.

THIRD—Our stock is purchased direct from the manufacturers.

FOURTH—We carry more best quality Brussels Carpets than any house in Canada.

FIFTH—Our stock of Tapestry Carpets is superior to any on this continent.

SIXTH—We buy only from first-class makers, such as Henderson, Southwell, Templeton, Crossley, Brinton, Hughes and Firth.

SEVENTH—Nearly all our best patterns are made especially for us and confined strictly to our house.

EIGHTH—Being direct importers and cash buyers we are in a position to sell carpets retail at and below wholesale prices.

NINTH—All the newest designs are regularly forwarded to us by our Mr. J. W. PETLEY, who is a resident of Manchester, Eng.

TENTH—We do not profess to be in the Carpet Trade for Forty Years, but we profess to supply our Patrons with all the Leading Styles which the best foreign markets can produce, and at prices with which no house can compare.

Note the Address, and when making your purchases be sure and visit

PETLEY'S, TORONTO,

THE LEADING CARPET HOUSE!