

SCIENCE.

ASTRONOMY FOR JUVENILES.—Children, this world in which we live seems to us to stand still, quite still, does it not? No one would suppose it to be constantly moving, yet it is. While you count or say one on the world has gone nineteen miles on its journey round the sun. It goes seventy-five times faster than a cannon ball at its greatest speed, and while the cannon ball stops, the earth goes on forever. The world travels more than six hundred millions of miles in its yearly journey round the sun. The moon is not like the sun; it is a planet, a cool and solid body not a fiery ball like the sun. It gives us light by reflecting upon us the light of the sun. The moon is only two hundred and forty thousand miles from us. It is only one-fifth part the size of the earth. The moon goes entirely round the earth once in four weeks. Other planets have moons. Neptune, like the earth, has only one; Mars has two, Jupiter and Uranus four each, and Saturn has eight. Around our sun revolve seven other large planets, and some hundred smaller ones. Uranus is eighty-two times as large as our earth; Neptune is one hundred and eleven times as large; Jupiter is twelve hundred and thirty times the size of the world we live in. The sun is ninety-three millions of miles from us, and is more than five hundred times larger than the earth and all the planets, moons and comets belonging to the solar system together, vast and extensive as some of them are. If an express train went at the great speed of sixty miles an hour, and could travel all around the world without stopping, it would take a month to complete the journey. Neptune is two thousand seven hundred and forty-six millions of miles away from the sun.

TO REMOVE TAR.—Tar may be readily removed from the hands by rubbing with the outside of fresh orange or lemon peel and wiping dry immediately. The volatile oils in the skin dissolve the tar, so that it can be wiped off.

The fumes of a brimstone match will remove berry stains from a book, or paper, or engraving.

CAUSE OF DEW.—If dew fell it would fall for the same reason that rain falls; but dew does not fall. It is simply a deposit of moisture always contained in the air to a greater or less degree, and which, when there is enough of it, will always form on any cold body exposed to the moisture, in precisely the same way that a cold body exposed to the moist, warm summer air, will become wet. This is not sweating nor does this moisture come out of the bottle or stone as many people believe, but from the air. It is for the same reason that moisture will condense against the window-panes when the air is cold outside, and moist inside, the moisture slowly freezing while its deposits form crystal ice which we so often admire in winter.

HOUSEHOLD.

FOR BEEF-TEA.—Cut a pound of tender beef into very small pieces, put them into a glass fruit jar with a little salt. Put the jar into a kettle of cold water, cover loosely, and let it boil steadily for about two hours. Pour off, add more salt, and eat hot, with crackers or toast. In cases of great weakness, it should be taken by the teaspoonful at short intervals.

There is scarcely a family in the country that cannot add to its income by careful management of a few swarms of bees. The work is light and much of it may be done by women and others not able to perform heavy labour. There are not nearly so many mysteries connected with bee-keeping as were once supposed.

MUTTON PIES.—Mutton pie makes a welcome dish for the children's dinner; cold roast or boiled mutton should be used for this purpose. Trim off nearly all the fat, cut the lean meat in small pieces and put them in a pudding dish; if you have any gravy or stock, pour that over

them; put in a little butter, and season with pepper and salt and a little parsley chopped fine; cover the top with a thick paste made just as you make baking powder biscuit; brown nicely in the oven.

SLOW COOKING.—Fish, almost more than anything else, is improved by slow cooking, especially is this true when the fish is boiled. If cooked rapidly it will fall apart, and will neither taste nor look as well. The great point insisted upon by scientific cooks of the present day is this of taking abundant time to prepare food in, and the fact that nothing is gained by rapid boiling.

Several thicknesses of a hot, dry white cloth; laid over a dish of newly cooked potatoes placed on the table will absorb moisture, prevent escape of heat, and promote 'mealsness' for a considerable length of time. In a closely covered earthenware or porcelain dish, as everybody knows they soon become soggy.

OXALIC ACID will almost always remove stains left by mud which cannot be removed with soap and water.

FARM AND GARDEN.

LOSSES IN FEEDING.—There are very few grains that make a perfect food ration. Corn which is usually fed for fattening is too starchy and too concentrated as well. If fed alone animals will not digest it perfectly. It is for this reason that a mixture with bran or oatmeal is advisable.

WARM MILK FOR CALVES.—It is a general belief among farmers that milk for calves should be slightly warmed, at least to the temperature natural when taken from the cow. The calves will drink it more freely at this warmth. When, however, the heating is done on the stove it is apt to be warmer than new milk. This is injurious. Milk that has been scalded is constipating, even when given cold. If the calf takes food much above the temperature of the stomach the digestive organs will be weakened. Too warm food and drinks are fruitful causes of dyspepsia in men and women, and will be in farm animals if the latter are subjected to their influence.

COARSE MANURE.—If coarse manure is to be spread on land for spring ploughing, the sooner it is done the better. The storms will beat it down to the ground, and it can be turned under with little trouble. If spread just before ploughing it lies lightly and will gather in masses before the plough, throwing it out and preventing good work. Unless the soil is heavy it will be better to compost the manure until fall and spread on the surface.

SOWING MANGEL WURTZELS.—One advantage of the mangel wurtzel as a crop is in the fact that the seeds are so large that they can be put in with a common grain drill set so as to distribute very thinly. In a mellow field previously marked, three rows may be drilled at one operation and the seed distributed more evenly than it would be apt to be by hand. With rows thirty-two inches apart, all the cultivation, excepting a little thinning out, may be done by horse labour.—American Cultivator.

Director Sturtevant, of the New York Agricultural Experiment Station, thinks one of the most desirable uses for coal ashes is to place them around the stems of currant bushes, quince trees and the mountain ash, in order to check the ravages of the borer. Currant bushes so treated have for many years proved extraordinarily thrifty, and have also been protected from the attack of the currant worm. Quince and mountain ash trees similarly treated have also been greatly benefited. The ashes for this purpose are heaped up about the stem to a height of perhaps six or eight inches, and extending about two feet from the trunk.

Many farmers feed roots without first freeing them from dirt. This is an injurious practice, and harmful to cattle.

France claims 150,000,000 francs indemnity from China.

HEALTH-HINTS.

BATHING.—A London sanitary paper gives this good advice:—To none but the strongest is a perfectly cold bath in cold weather either pleasant or profitable. The water, as a general rule, should be of the same temperature as the body, so that no disagreeable shock is caused by plunging into the bath; while on no account, in the case of a bath, should it be so warm as to prevent an invigorating and refreshing sensation on emerging. Sir James Paget, the eminent English surgeon, says:—'Have the temperature of the water just as you like it.'

The Lancet does not approve of children's parties, and thinks that not only in winter, but at all seasons the amusements of your children should be simple, unexciting, and as free as possible from the characteristics of the pleasures of later years.

A New York physician writes that, after years of practical test of the milk diet for Bright's disease, he has a long list of cases in which he has made perfect cures. Great care is taken to get absolutely pure skimmed milk, from healthy and well fed cows and no other food of any kind is given after the patient can bear five pints of milk a day. Up to this point, and until the stomach is able to take care of so much is found to be the most trying period in this treatment, but no other medicine is given, and hand and hair-glove rubbing is daily administered.

Another correspondent takes exception to the claim made, that no drug of any therapeutic value in that disease has yet been discovered. In support of his assertion he sends us a recipe which he claims has effected a cure in Bright's disease, as well as in dropsy, in every case in which it has been tried during the last fifteen years. He recommends the drinking of an infusion of the dry pods of the common white soup bean or corn bean. When the latter cannot be readily obtained the pods of the 'snap short' bean will answer, and even the Lima bean, though the latter is of inferior strength. The recipe is as follows: 'Take a double handful of the pods to three quarts of water; boil slowly for three hours until it is reduced to three pints. Use no drink of any kind but this, the patient drinking as much as he conveniently can; it may be taken either hot or cold.'

VARIETIES.

A dandy with a cigar in his mouth entered a menagerie, when the proprietor requested him to take the weed from his mouth, lest he should teach the other monkeys bad habits.

A pair of Queen Elizabeth's gloves can be seen in the British Museum. She had a hand like a brakeman. The thumb of the glove is five inches long, and the palm measures three and a half inches across. No wonder the kingdom trembled when she brought it down.

A shark recently captured at Tabogara, Panama, was 33 feet long, and had a mouth large enough to take in a horse. A photograph of the carcass was taken with a man standing upright between the jaws.

Walk-around-and-Talk is the name of a Sioux Indian girl now in New York. She was named after a book-agent that once visited the tribe.

'There is one thing about babies,' said a recent traveller, 'they never change. We have girls of the period, men of the world, but the baby is the same self-possessed, fearless, laughing, voracious little heathen in all ages, and in all countries'

The letters R, S, V, P, which means in English, 'Reply, if you please,' are now superseded by the sentence: 'The favour of an answer is requested.'

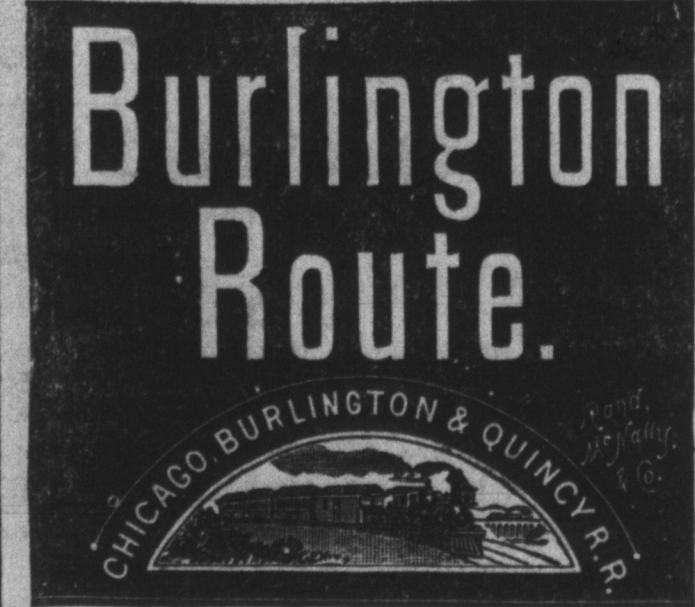
A Philadelphian sent a postal card to his sister in Canada on which he had written 644 words. She answered with 714 words. Not to be outdone he crowded in 1,003, which brought an answer with 1,526 words spelled out in full and written plain enough to be easily read by persons of ordinary sight. He thinks he will send her a new spring bonnet and call it square.

'How do you kill time here?' asked a swell visitor of an equally swell New Yorker. 'Oh, with our clubs,' was the reply. And the pair went off to look up one, each having some time to kill.—N. Y. Commercial Advertiser.

An estimate of the world's wheat production places it at a little over two thousand millions of bushels, of which Europe furnishes about one-half, the United States and Canada one-quarter, and India one-eighth.

France claims 150,000,000 francs indemnity from China.

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