# Science Siftings

By 'Volt'

The Swallow's Flight.

Recording bird migrations, Otto Herman, a Hungarian ornithologist, is surprised to find that swallows take 105 days to complete their passing from Gibraltan to Lulas in Swadan to Lulea, in Sweden.

#### A Remote Danger,

According to the great astronomer, Sir Robert Ball, of London, the sun is shrinking at the rate of sixteen inches daily. But as according to the calculations of the same eminent authority, the source of earth's light and heat is warranted to last 24,000,000 years longer, there is no seed of immediate concern about the shrink-

How Hunger is Caused.

Hunger, as recently defined by M. I. Knapp, is the sensation due to the contraction of the muscles of the pylorus, or possibly of the entire stomach, or of the duodenum, or of all these structures. Hunger is painful or slight, according to the intensity of contraction. It is a lesser degree of pain and, being due to muscular contraction, it passes off from tiring or relaxing of the muscles even if no food is taken. Inability to contract, relaxation and distension result in anorexia, the opposition of appetite appetite of appetite app opposite of appetite, produced by non-irritating gases.

A New Use for the Phonograph

In teaching a parrot to talk, the usual plan is to hide behind a screen, or to cover the cage, and repeat over and over the words to be said. The average bird takes a week to learn a single sentence. The task of teaching, therefore, is very tedious, and the happy thought of the wife of a leading bird fancier promises to become a great labor-saving idea. It occurred to her to put the task upon the phonograph. The first experiment, upon eight birds, has proved highly successful, and they are rated as the finest talkers in the world. ful, and they are rated as the finest talkers in the world, with a high value.

Cause of Headaches.

A physician finds that headaches are due to three main causes. The first is a disordered nervous system, and often results from the worry and stress of life, never from properly-called work. Belonging to this class also is the headache of anaemia, so common among young girls of ill-nourished nervous systems and impoverished blood. The second great cause is eye-strain, which does not depend upon defective mainly being and depend on the second great cause is eye-strain, poverished blood. The second great cause is eye-strain, which does not depend upon defective vision, but on a faulty shape of the eye that overtaxes the muscle of accommodation and is to be corrected by proper glasses. Headaches from this cause, unlike others, are often severe at night and absent in the morning. The third kind of headache is due to poisons in the blood, and its throbbings give evidence of too high blood pressure resulting from disorders of digestion due to over-eating of rich food, imperfect mastication, or lack of exercise.

#### Balloon Trips.

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Airship travel seems to be already popular. W. de Fonvielle estimates that 700 or 800 balloon voyages are now made annually, and states that the members of the French Aero Club alone made more than 200 last year. The forms and colors of the clouds, the brightness, and the new views of the earth give a wonderful charm to sky automobiling. This is increased at night, and Camille Flammarion, whose wedding trip was made in a balloon, has expressed his surprise at the splendor of the lights of a great city—in this case Paris—as well as at the brilliancy of the constellations. The number of the stars is unbelievable, the dog-star becomes as bright as Venus, while some of the nebulae appear like gas-jets. The shooting stars are terrifying. Their explosions seem to be heard, and this may be really true, as the balloon acts like a gigantic ear-trumpet, and catches such earthly sounds as the whistling of locomotives and barking of dogs. Hygienically, the complete renewal—of the air in the lungs is a delightful sensation. sensation.

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## The Home

Bv · Maureen

Mincemeat.

Chop 2th suct very finely. Stone and chop 2th raisins, clean 1th currants, peel and finely chop 2th apples and 1th lemon peel. Put all these ingredients into a basin, add four cloves, toz mace or mixed spice, the rind and juice of 3 lemons, and 1toz chopped almonds. Mix all well together, pour over quarter of a pint brandy and quarter of a pint port or home-made wine, and tied closely down in jars till required.

Rich Plum Cake.

Well line a cake-tin with buttered paper. Cream together ½lb butter and ½lh castor sugar. Well whisk 5 eggs and add them gradually to the sugar and butter. Sieve together ½lb flour, 1 teaspoonful baking-powder, and ½ teaspoonful salt. Add to the butter and eggs. Now stir in ½lb sultanas, ½lb glace cherries, ½lb finely chopped almonds, the grated rind of 2 lemons, ½oz powdered cloves, spice, and cinnamon mixed, and either 1 gill of brandy or a gill of milk. Put into the tin. Place the tin on a baking-sheet on a layer of sand, and bake for two and a half hours in a moderate oven.

Christmas Pudding.

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Chop 1lb suet very finely, mixing with it ½th flour. Make ½th breadcrumbs. Clean 1lb currants and 1lb sultanas, stone and chop 1lb raisins, chop ½th lemon peel, and 3oz sweet almonds and 1oz bitter. Skin them first. Put all these ingredients into a basin with 1lb brown sugar, add the grated rind of a lemon, one grated nutmeg, and a pinch of salt, and mix well. Well beat 8 eggs, add to them quarter of a pint'milk and quarter of a pint brandy or home-made wine, pour this into the flour, etc., and stir thoroughly. Put into well-greased basins or moulds, tie well-floured cloths securely over, place in fast boiling water, and boil for not less than eight hours. After they are cold remove the cloths and tie down again with clean ones, and hang in a dry place till needed. till needed.

The Proper Feeding of Babies.

The wastage of infant life is one of the evils of our modern civilisation which calls for prevention, and the question has been taken up with much earnestness in many parts of England, especially at Huddersfield, where the Mayor has taken practical steps to educate mothers as to the best methods of feeding babies. But it is not in England alone that great infant mortality, arising mainly through ignorance and carelessness on the part of mothers, exists, for it is recognised by medical men that the lives of many infants are careful. arising mainly through ignorance and carelessness on the part of mothers, exists, for it is recognised by medical men that the lives of many infants are sacrificed every year in this Colony owing to the ignorance of those responsible for their welfare. The question of the proper feeding of infants has been taken up in Dundedin by Dr. Truby King, Medical Superintendant of Seacliff Asylum, who is assisted in this humane crusade by Dr. Alexander. It is intended to form classes for the hetter study of the subject, where mothers and others in charge of young children will be instructed as to the best foods for children and what to avoid. It may be mentioned that Dr. King lays special emphasis on the fact that nothing is as good for children and their mothers as the natural nursing of infants, and that any substitutes, however good, are only to be resorted to when mothers are unable to nurse their offspring. It is proposed to hold a public meeting shortly for the purpose of bringing the subject of the proper care of infants into general notice.

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