# Science Siftings 

## By 'Volt'

## The Swallow's Flight.

Recording bird migrations, Oito Herman, a Hungarian orndthologist, is surprised to find that swallows take 105 days to complete their passing from Gibraltar to Lulea, in Sweden.

A Remote Danger,
According to the great astronomer, Sir Robert Ball, of London, the sun is shrinking at the rate oi suxteen 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 aeed of immediate concern about the shrinkage.

## 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, accordung 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 of no food is taken. Inability to contract, relaxation and distension result in anorexia, the 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 sugle 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 10 her to put the task upon the phonograph. The first experiment, upon eight birds, has proved highly suceessfut, and they are rated as the finest talkers in the world, with a high value.

## Cause ol IJeadaches.

A physician finds that headaches are due o 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 anacma, so common among young girls of $t l-$ nourished nervous systems and im poverished blood. The second great cause is eye-strain, whech 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. IIeadaches from this cause, unlike others, are often severe at night and absent in the morning. The thrd hind of headache is due to poisons in the blood, and its throbbines give evidence of too high blood pressure resulting from disoxders of digestion due to over-eating of rich food, mperfect mastication, or lack of exercisc.

## Balloon Trips.

dirship travel seems to be already popular. W. de Fonvelle estimates that 700 or 800 balloon royages are now made amoually, and states that the members of the French Acro Club alone made more than 200 last year. The forms and coloss of the clouds, the brightness, and the new news of the earth give a wonderful charm to sky automobiling. This is increased at night, and Camille Flammarion, whose weddng tuip was made in a balloon, has expressed lus surprise at the splendor of the lights of a great enty-in this case Paris-as well as at the brifiancy of the constellations. The number of the stars is unbelsevable, the dog-star becomes as bright as Venus, whlle some of the nebulae appear like gas-jets The shootmg stars are terniyng Theirevplosions seem to be heard, and this may be really thue, as the balloon atts luse a gigantic ear-1rumpet, and catches such earthly sounds as the whasthing of locomotives and batkng of does. Hygienically, the complete renewal of the and in the lungs is a delightful sensation.

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## The Home

## By •Maureen

## Mincemeat.

Chop 21 b suet very finely. Stone and chop $2 \frac{1}{2}$ th raisins, clean $1 \frac{1}{2} t b$ currants, peel and fincly chop 2 tit apples and 4 dit lemon peel. Put all these ingredients into a basin, add four cloves, $\frac{1}{2}$ oz mace or mixed spice, the rind and juice of 3 lemons, and $1 \frac{1}{2} 0$ chopped almonds. Mix ail well together, pour over quarier of a pint brandy and quarter of a pint port or home-made wine, and tie, closely down in jars till required.

## Rich Plum Cake.

Well line a cake-tin with buttered paper. Cream together $\frac{1}{2}$ tb butter and $\frac{1}{2} f$, castor sugar. Well whisk 5 eggs and add them gradually to the sugar and butter. Sieve together 量 1 b flour, 1 teaspoonful baking-powder, and $\frac{1}{2}$ teaspoonful salt. Add to the butter and eggs. Now stir in $\frac{1}{2}$ th sultanas, $\frac{1}{2}$ it glace cherries, $\frac{1}{4} \mathrm{tb}$ finely chopped almonds, the grated rind of 2 lemons, $\frac{1}{2}$ oz 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.

Chop 1 lb suct very finely, mixing with it $\frac{1}{2}$ ith flour. Make $\frac{1}{2}$ th breadcrumbs. Clean 1 lb currants and 11 b sultanas, stone and chop 1 tb raisins, chop $\frac{1}{2} 1 \mathrm{~b}$ lemon peel, and $3 o z$ sweet almonds and $10 z$ bitter. Skin them first. Put all these ingredients into a basin with. lith 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-foured cloths securely over, place in fast boiling water, and boil for not less than elght hours. After they are cold remove the cloths and tic down again with clean ones, and hang in a dry place tall needed.

The Froper 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 mueh 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 sacrificed arery 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 Dunedin by Dr. Truby King, Medical Superintendant of Seacliff Asylum, who is assisted in this humane crasade by Dr. Alexander. It is intended to form classes for the better study of the subject, where mothers and others in charge of young children will be instructed as to the best foods for chuldren and what 10 avoid. It may be mentioned that br. 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 pubicic mecting shortly for the purpose of bringing the subject of the proper care of
infants into general notice.

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