

Science Siftings

By 'Volt'

The Longest Day.

The longest day of the year in London is 16½ hours, in New York 15 hours, in St. Petersburg 19, in Tornea (Finland) 22, and in Spitsbergen three months and a half.

Cause of Sunstroke.

Sunstroke, it is pointed out, is due to the chemical and not to the heat rays. The active rays penetrate anything except a color screen, and an Egyptian army officer has effectively protected himself by lining his helmet and coat with yellow.

Where Music is Prescribed.

Vocal or instrumental music as a therapeutic agent has been found by Dr. F. S. Kennedy to be a useful aid in melancholia, insomnia, hysteria, family affliction, business reverses, delirium, pain, and mental or physical fatigue. A German physician has used music to lessen the distress and after effects of applying anaesthetics.

One of Nature's Mysteries.

The problem of the ascent of sap in trees, an English botanist points out, is yet unsolved. It appears that in the highest trees the total pressure would be nearly 100 atmospheres, and as we cannot suppose that leaves can exert so intense osmotic suction, the only theory at all probable is that the living cells exert some sort of pumping action in the wood.

Wireless Telegraphy on Trains.

The Chicago and Alton Railway announces that it has made all arrangements for the establishment of a wireless telegraph system on all its trains running between Chicago and St. Louis, and that eventually all its trains will be in wireless telegraphic communication with the larger cities. The announcement was the result of careful tests made on a limited train running between Chicago and St. Louis. The observation car was equipped with the wireless apparatus. Messages were received while the train was running at a speed of fifty miles an hour.

Voice Museums.

Collections of voices are being made for various purposes. The phonograms of the British Museum are designed to preserve for future generations the voices of famous people of our time; but the Vienna Academy of Sciences is going further, and seeks phonograms of languages and dialects for the comparative study of languages. Already its collection includes popular songs of gypsies and Arabians, favorite airs of Red Indian tribes, the idioms of Negroes and Malays, and so on. It is sending out special voice-hunting expeditions every year, and its agents are now scouring Hungary, Roumania, Istria, and other localities. Its latest plan is to phonograph the voices of animals, for scientific study.

Steel Pens.

We owe the steel pen to a man named Gillott—Joseph Gillott—an Englishman. Gillott was a jeweller. He lived in Birmingham. One day, accidentally splitting the end of one of his fine steel jewel-making tools, he threw it peevishly on the floor. An hour later it was necessary for him to write a letter. Where, though, was his quill pen? He searched high and low, but couldn't find it. Looking finally on the floor he discovered not the pen, but the broken steel tool. "I wonder if I couldn't make shift to write with this," he said. And he tried to write with the split steel, and, of course, he succeeded perfectly. To this episode we owe the steel pen, which has superseded the quill all over the world.

The testimonial which is being got up to aid the family of the late Dr. O'Doherty is meeting with a generous response. The Sydney 'Freeman's Journal' has received a cheque of £15 towards the fund from St. Brigid's Convent, Masterton.

'The publication of an advertisement in a Catholic paper shows that the advertiser not only desires the patronage of Catholics, but pays them the compliment of seeking it through the medium of their own religious journal.' So says an esteemed and wide-awake American contemporary. A word to the wise is sufficient.

The Home

By Maureen

For Sore Throats.

A sore throat should never be neglected, especially in the time of epidemics. A cleansing gargle is made by dissolving a heaped saltspoonful of salt and carbonate of soda, mixed in equal quantities, in half a tumblerful of water.

Cooking Old Fowls.

Fowls which are old, and therefore likely to be tough, should be steamed for two hours, and afterwards roasted in a rather quick oven for half an hour, and kept well basted. If this is done they will be very much improved.

Toilet and Laundry Soaps.

All soaps, toilet or laundry or household, go much farther if kept for some time in a dry place before using. New soap lathers too freely to waste, therefore it is more economical to buy a quantity and keep the bars or cakes some time, instead of buying it as you actually want it.

To Distinguish Cotton from Linen.

To distinguish cotton from linen when you are choosing handkerchiefs, moisten the tip of a finger and place it on the handkerchief. If it is wet through at once it is linen, but if cotton be present in its manufacture it will take some seconds to penetrate the threads. In linen the threads are less even than in cotton.

Worth Knowing.

During hot weather nothing is so good for preserving perishable eatables as the common red flower-pot, as it acts as a perfect non-conductor of heat. Butter placed underneath a flower-pot having its head crowned with a wet napkin will remain hard and firm. Fresh milk, if placed in a can of cold water and covered with a large flower-pot, the pot again covered with a napkin, the ends of which should hang in the water to keep it constantly wet, will keep sweet and free from evil germs for ever so much longer than if left about in the ordinary way.

To Strengthen the Eyes.

The eyes will be greatly strengthened by putting the face down into a glass or eye-cup of water the first thing in the morning and opening them under water. This is somewhat difficult to do at first, but if the water for two or three days be tepid and gradually be made colder by imperceptible degrees until it is no shock to put the face into quite cold water, it will soon become easy, and is very invigorating and refreshing. The eyes should be wiped after this by passing a soft towel very gently from the outer angle inward toward the nose.

To Ease a Headache.

Take a sponge and a basin of hot water as hot as it can be used. Pass the hot wet sponge slowly and steadily over the face and forehead for eight or ten minutes, keeping the sponge as hot as it can be used. By this time the face will seem as if it were parboiled. Dry it in a soft towel. Next bathe the back of the neck as you have done the face, carrying the sponge each time well up the back of the head. Keep up the bathing for some length of time, then, if thirsty, take a cooling draught, and lie quietly for half an hour to rest. If sleep is not likely to visit you, just lie in a darkened room with closed eyes, and try to rest the brain.

Shabby Clothes.

A woman of wonderful resource has just discovered a new and very sure way of renovating and restoring to their former appearance spotted, soiled, or faded cloth or serge gowns. Pick about twenty ivy leaves—young green ones for choice, wash them carefully and place them in a jug or basin; add about one pint of boiling water, cover up the basin or jug, and leave to soak for two or three hours, when it will be ready for use. Meanwhile the garment must be thoroughly brushed inside and out, and all untidy braiding or lining removed from the bottom. When ready spread it on the table and carefully sponge with the ivy water. It must then be hung out to dry, when it will be found to have recovered its former color and to look quite like new.

Maureen