

## Science Siftings

By 'Volt'

### The Eyes of Animals.

Many animals possess more than two eyes which do not act together. A leech, for example, has ten eyes on the top of its head which do not work in concert, and a kind of marine worm has two eyes on the head and a row down each side of the body. Some lizards have an extra eye on the top of the head which does not act with the other two. A bee or wasp has two large compound eyes which possibly help each other and are used for near vision, and also three little simple eyes on the top of the head which are employed for seeing things a long way off.

### Silk and Twine from Smokeless Powder.

Silk and twine are now being made by the military authorities in various countries from smokeless gunpowder. Smokeless powder is a nitro-cellulose compound, and its basis is guncotton; it can be made glutinous, so as to be squeezed through fine holes in a metal plate, producing threads after the manner of artificial silk. These gunpowder threads are woven into silk for holding the powder when placed in the gun, and also into twine for fastening the necks of the bags. When the charge is fired nothing remains of the bag.

### How Sea Birds Quench Their Thirst.

The question is often asked, 'Where do sea birds obtain fresh water to slake their thirst?' but it has never been satisfactorily answered until recently. An old skipper has told how he has seen these birds at sea, far from any land that could furnish them with fresh water, hovering under a storm-cloud, clattering like ducks on a hot day at a pond, and drinking in the drops of rain as they fell. They will smell a rain-squall when a hundred miles away, or even further, and fly towards it with almost inconceivable swiftness. How long sea birds can exist without water is a matter of conjecture, but probably their powers of enduring thirst are increased by habit, and possibly they go without water for many days, if not for several weeks.

### The Sea-Serpent.

Nature sometimes plays strange pranks. What scientist, for instance, reasoning along orthodox lines, could have dreamed of the existence of seals in Lake Baikal, in Central Asia, a thousand miles and more from the sea. Yet there they are (says 'T.A.T.'), proving, beyond the possibility of a doubt, that once upon a time that great fresh-water lake must have been connected with the open ocean. Similarly, the fossil remains of whales found around Lake Nyanza show that the great Central African rift extended to the salt sea after a like fashion. And in this connection it is noteworthy that only within recent years has the existence of seals in Lake Baikal been certainly proved. Their presence there, although always insisted upon by the natives, was regarded in the nature of a legend. Yet the lake is but a puddle compared with the limitless waters wherein the sea-serpent is said to disport itself. Everyone is familiar with the arguments for the existence of this monster; how, for instance, the vast expanse of ocean, which covers three-quarters of the globe, is, after all, a well-nigh unknown waste, only crossed in comparatively few directions by established ocean-lanes that can be easily avoided. And its depths are abysmal. Who shall dare say what strange beings lurk therein. Why, until the 'Challenger' expedition, the existence of what are now known as the deep-sea fishes was quite unsuspected. 'How is it possible,' scientists argued, 'for highly organised creatures like fishes to exist amidst total darkness, in a temperature for the most part at or below freezing point, and subject to a pressure per square inch that can be reckoned in tons?'

### HOW TO PAINT A HOUSE CHEAP.

**Garrara Paint** In White and Colors, Mixed Ready for Inside and Outside Use. **CARRARA** retains its Gloss and Lustre for at least five years, and will look better in eight years than lead and oil paints do in two. **USE CARRARA**, the first cost of which is no greater than lead and oil paints, and your paint bills will be reduced by over 50 per cent. A beautifully-illustrated booklet, entitled 'How to Paint a House Cheap,' will be forwarded free on application.

K. RAMSAY AND CO., 19 Vogel Street, Dunedin.

## The Home

By 'Maureen'

### To Keep Plate Polished.

Amongst the minor annoyances of housekeeping is the fact that, however carefully plate may be cleaned before putting it away, in the course of a week or so it becomes dull or tarnished. This may be avoided by the following means: After thoroughly cleansing and then polishing the plate with whiting, wrap up each piece in tinfoil, such as is used for wrapping up chocolate, tea, etc., then put the articles in a dry cupboard or drawer, and at the end of many years you will find your plate as bright as on the day it was first packed.

### To Kindle Fires.

Clean out your grate; cover the bottom with a sheet of paper, cut or folded to fit; place your coals in the grate to the level of the top bar, keeping the larger ones to the front to prevent waste. Light your fire on the top, and allow it to burn downwards undisturbed. An ordinary fire, prepared and lighted in this way, will, according to the size and form of the grate, burn four, six, or eight hours without any renewal of coal, burning brighter and warmer than if lighted from below, as fires are ordinarily made. The coal should be tolerably equal in size, large to the front and small to the back. Fires made like this effect a great saving of coal, besides the cheerfulness, warmth, and freedom from smoke.

### How to Make a Filter.

The purification of water for drinking is now so strongly advocated, that a filter is regarded as indispensable in almost every household. At the same time it is well to remember that unless the greatest care is taken to keep the filter clean, it becomes in itself a dangerous source of contamination from the accumulation of impurities within it. The following simple filter has been tried and proved to be as efficacious as the most costly. In addition the filtering media in this case costs nothing, so it can be changed very frequently. Take a very large flower-pot and insert a piece of sponge in the hole at the bottom. Place in the pot a layer of sand three inches thick, over that a layer of powdered charcoal. Place the filter on two flat sticks laid across a clean pail. Keep filled with water and use as it runs through. It is a wise precaution to boil the water before filtering it—and is recommended by experts, as one of the most effective means to be adopted during the prevalence of epidemics.

### The Care of the Piano.

The temperature of the room in which the piano is kept is one of the most important things to be considered. As moisture is absolutely necessary, see that the air in the room is not allowed to become too dry. A growing plant will prove a good test; if it thrives you may be sure that the atmosphere is suitable to the piano, if, on the other hand, the plant does not thrive, it would be well to find out the reason. About 70 deg. is the proper temperature for the room in which the piano is kept. Do not allow it to stand where the sun's rays shine directly upon it, and be careful to keep it closed and well covered while the sweeping and dusting of the room in which it stands are in progress. To prevent the case of your piano from becoming smoky in appearance, wipe a small portion at a time with a fine sponge wet in tepid water, to which a little Castile soap has been added. Dry with a moistened chamois cloth, which has been wrung until it is almost dry. When this has been done apply some reliable piano polish with a soft flannel cloth. Attention to these details will enable you to keep your piano bright and new looking for many years.

*Maureen*

Lord Elgin claims to be the direct descendant of the male line of King Robert the Bruce, whose sword and helmet are kept at Broomhall. He is a godson of Queen Victoria, from whom he received many tokens of affection, among them a beautifully carved bust of herself.

**MOUNTAIN KING ASTHMA POWDER** (Registered) gives immediate relief in cases of Chronic and Humid Asthma. Never fails. Give it a trial. All chemists and stores. 2s 6d.

GOLD MEDAL ST. LOUIS EXHIBITION,  
Bottled in Auckland,

**Hancock's Imperial ALE and STOUT,**