Utilising By-Products

The value of products annually manufactured out of materials which thirty years ago were thrown away as waste amounts to fully £100,000,000—a sum equal to nearly seven times the annual production of gold in the United States.

Sawdust was for years looked upon as an absolutely waste material (says 'Moody's Magazine'), and was either dumped into a stream of flowing water or either dumped into a stream of flowing water or thrown into a heap where it could be conveniently disposed of. During the last few years a process has been discovered which has given sawdust a value greater than that of solid timber. By the use of hydraulic pressure and intense heat the particles are formed into a solid mass capable of being moulded into any shape and of receiving a brilliant polish. The only materials used are sawdust, alum, and glue. Imitation marble can be manufactured from a mixture of sawdust with ivory waste, waterglass, and glue. In Norway acetic acid, wood naphtha, tar, and alcohol are produced on a commercial scale out of sawdust. The principal use of sawdust seems destined to be in the production of sugar and of alcohol. It is practically pure cellulose and easily convertible into those products. ducts.

For many years bituminous coal operators away slack as waste. Later it sold for 5 cents a ton. To-day it commands at the mine 75 cents a ton. The increase is due to demand coming from makers of cement. Formerly they bought lump coal and pulver-

Each large packing establishment now has its long list of by-products. The products of the gray brain matter of calves are employed in affections of the nervous system, such as nervous debility, nervous exhaus-

vous system, such as nervous debility, nervous exhaustion, St. Vitus' dance, mental disorder, and insantty.

The blood of the slaughtered animals is congealed and manufactured into buttons, and is also utilised in the production of albumen for the use of the calico printer, the sugar refiner, the tanner, and others.

The bones are used for a score of different purposes, being manufactured into knife and toothbrush handles, chessmen, combs, backs of brushes, mouthpieces of pipes, and various other articles. Black hoofs are used in the manufacture of cyanide of potassium for gold extraction, and are also ground up to make fertilizer for florists, grape-growers, and others.

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Prior to 1860 cotton seed was usually hauled to a remote place to rot or dumped into a stream of flowing water. Out of this product, then deemed a nuisance, there was manufactured in 1900 by-products having a value of £8,000,000.

More than a score of products are to-day manufactured out of cotton seed, including butter, paper, fertilizer, cotton batting, cattle feed, soap, land, cottolene, crude oils, and salad oils. The vice-president of the Standard Oil Company is authority for the statement that for the last ten years more than one-half the profits of the company have been made out of the manufacture of by-products.

'Catholic Marriages'. The book of the hour. Single copies, 1s posted; 12 copies and over, 8d each, purchaser to pay carriage. Apply, Manager, 'Tablet', Dunedin.

AND SURE FOR BRONCHITIS PATIENTS. SAFE AND SURE FOR BRONCHITIS PATIENTS.

TUSSICURA (Wild Cherry Balm, is an exceedingly successful remedy for Bronchitis, Asthma, Lung and Throat troubles. Says a well-known medical man to-day in speaking to the proprietor:— I think most highly of your TUSSICURA, and may add that leading analysts look upon it as a very valuable discovery.

TUSSICURA cures colughs and colds at once. Stops the tickle and affords easy expectoration. All stores.

Jinks, M.H.R., grew desperate, Drugs by the quart was quaffin', And yet his cough would indicate He'd soon require a coffin! He took Woods' Peppermint Cure! And since He's been of all debaters The ne plus ultra, and the prince Of loud-lunged legislators!

Mr. J. Casey, Princes street, Dunedin, has opened up some splendid lines of gentlemen's winter wear, such as Mosgiel and Roslyn all pure wool pants and singlets, shirts in Ceylon cloth, overcoats, etc. These goods are all first-class, and can be depended upon....

Domestic

Taking Sulphur.

As sulphur is considered one of the best blood purifiers, and is disagreeable to take in molasses, if a teaspoonful is put into a glass of milk and stirred thoroughly, the taste is not perceptible. It should be taken for three mornings, then one half-teaspoonful of cream of tartar for three mornings, till both mixtures have been taken for twelve days.

Worry.

Worry, so prevalent in the age we live in, is a species of monomania. No mental attitude is more disastrous to personal achievement, personal happiness, personal appearance, and personal usefulness in the world than worry and its twin brother, despondency. The remedy for the evil lies in training the will to cast of cores and cooks other acts. cast off cares, and seek a change of occupation when the first warning is sounded by Nature in intellectual lassitude. Relaxation is the certain foe of worry, and 'don't fret' one of the healthacst of maxims.

How Not to Save.

Don't try to save money by using cheap soap. You will ruin your complexion and have to buy cold cream if you do. Sewing in the dusk. Gaslight is cheaper than oculists' bills. Wearing thin clothing. Flannel is cheaper and better than medicine. Going without luncheon. You will impure your health and digestion if luncheon. You will injure your health and digesti you do. Walking when over-tired to avoid fares. will save money, but undermine your constitution. Overworking. Nobody thanks you. You will be cross and irritable, and your relations will wish you were not so zealous.

Chewing the Food.

Thirty chews are the least we should give to every bite of food; instead of that, we scurry through our meals, we bite our food and hastily swallow it with the help of a mouthful of water or other fluid, with the result that there is first indigestion, from stomach receiving improperly chewed food; secondly, all the evils which follow indigestion—namely, muddy complexion, red nose, and lustretess eyes. Then the teeth suffer from lack of use. The teeth are meant for chewing the food, and if not used for the purpose for which Nature intended them will surely decay. One's looks depend much upon the proper where of food looks depend much upon the proper chewing of food.

Breathe Through the Nose.

Correct breathing is one of the most salutary tonics of which an invalid can take a draught. Breathe through the nose—that is the most important function of the nose. Recent investigations showed that the palates of an alarming proportion of the population of London are not pink, as they should be, but of a bluish hue. That is because the London atmosphere is so impure. But if Londoners all breathed through their nostrils instead of through their mouths, the air would have been filtered before it reached the lungs, and the partirel condition of the polate would have been menatural condition of the palate would have been preserved. Each respiration should be long drawn and regular. Cases, have occurred in which indigestion, consumption, insomnia, and seasickness have all been cured by proper attention to a systematic exercise in correct breathing. correct breathing. Toilet Hints.

If the finger nails are brittle and break easily, rub

If the finger nails are brittle and break easily, rub vaseline on and around them after washing them. It will prove very beneficial.

Warts will quickly disappear if painted with a tincture of iodine once a week and rubbed with carbonate of soda each time after washing.

Those who desire to gain flesh should not fail to eat a light meal before retiring; an empty stomach feeds upon the flesh of the body.

Too much sleep is farely possible during childhood and exhaustive states; on the other hand, too much sleep is harmful to those in full tide of vigor.

Wrinkles are not from age alone. Facial expression, illness, and worry contribute their share of the unwelcome lines. Good health and joyful spirits are the best preventives of wrinkles.

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Rinsing the skin thoroughly after washing is quite as important as the washing itself. Soap must be washed out of the pores of it will toughen and dry the skin and aggravate the tendency to blackheads.

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at night Woods' For Children's Hacking Cough at a Great Peppermint Cure. 1s 6d and 2s 6d.