

or not it is ingenious enough to go in the Captain's puzzle-box: SING A SONG OF SIXPENCE. The four-and-twenty blackbirds, Mr. Tyler supposes, are the four-and-twenty hours, and the pie which holds them is the underlying earth, covered with the over-arching sky.

TOWN AND COUNTRY. Fine ladies of fashion, great lords of renown, You'll never tempt me with your life in the town. To think how you squander your beautiful June, Chained down to hot pavements and crowded saloons.

TEMPEPERANCE. A CIGAR SCIENTIFICALLY DISSECTED. A polite visitor who, during his interview with us, had rendered our sanctum redolent with the fumes of a fragrant Havana, has just left a cigar on our table with the laughing request that it is an exceptionally fine cigar, we are unable to gratify our friend's desire, seeing that we don't smoke; but the thought occurs that we can show our appreciation of the gift by applying to it the light, not of a match, but of science, and thus giving our friend and brother smokers something to ponder over next time "the blue upcurling smoke" leads them to reverie.

To the world in general a cigar is merely a tightly-rolled packet having brittle fragments of dry leaves within, and a smooth silky leaf for its outer wrapper. When it is burnt, and the pleasantly flavored smoke inhaled, the habitual smoker claims for it a soothing luxury that quiets the irritable nervous organism, relieves weariness, and entices repose. Science, scouting so superficial a description, examines first the smoke, second the leaf, third the ash. In the smoke is discovered water in vaporous state, soot (free carbon), carbonic acid and carbonic oxide, and a vaporous substance condensable into oily nicotine. These are the general divisions which Vohl and Eulenberg have still further split up; and in so doing have found acetic, formic, butyric, valeric, and propionic acids, prussic acid, creosote, and carbolic acid, ammonia, sulphuretted hydrogen, pyridine, viridine, picoline, lutidine, colidine, paroline, coridine, and rubidine. These last are a series of oily bases belonging to the homologues of aniline, first discovered in coal tar.

Applying chemical tests to the leaves, other chemists have found nicotine, tobacco camphor or nicotianine (about which not much is known), a bitter extractive matter, gum, chlorophyll, malate of lime, sundry alkamoids, malic acid, woody fibre, and various salts. The feathery white ash, which in its cohesion and whiteness is indicative of the good cigar, yields potash, soda, magnesia, lime, phosphoric acid, sulphuric acid, silica, and chlorine.

Our friend has kindly left us a fine cigar; had it been a poor and cheap one, the ingredients we should extract would be fearful, and wonderful to contemplate. Here is the list from an English parliamentary report on adulteration in tobacco: Sugar, alum, lime, flour or meal, rhubarb leaves, saltpeetre, fuller's earth, starch, malt comings, chromate of lead, peat moss, molasses, burdock leaves, common salt, endive leaves, lamp-black, gum, red dye, a black dye, composed of vegetable red, iron and liquorice, scraps of newspaper, cinnamon stick, cabbage leaves, and straw brown paper.

Returning now to the smoke, or rather its ingredients, Dr. B. W. Richardson, in his "Diseases of Modern Life," considers the effect of the same on the body at considerable length, basing his conclusions on actual investigation. He tells us that water, of course, is harmless; free carbon not mechanically as an irritant, and tends to discolor the secretions of the mouth. Ammonia bites the tongue, exercises a solvent influence on the blood, excites the salivary glands, and thus causes a desire to drink while smoking. The

tendency of carbonic acid is to produce sleepiness, headache and lassitude. When a cigar is smoked badly, that is, when the combustion of the tobacco is slow and incomplete, carbonic oxide is produced in small quantities and is an active poisoning agent, resulting in irregular motion of the heart, vomiting, convulsions of the muscles, and drowsiness. The nicotine tends to cause tremor, palpitation of the heart, and paralysis. The volatile empyreumatic substance produces a sense of oppression, and taints the breath and surroundings of the smoker with the well-known "stale tobacco smoke" smell. The bitter extract causes that sharp nauseous taste peculiar to a re-lighted cigar or an old pipe.

By trying the effect of tobacco smoke on the lower animals, we can obtain an idea of its influence on ourselves. Small insects are stupefied rapidly, but recover in fresh air. Cold-blooded animals succumb slowly to the smoke, birds rapidly. Some animals, such as the goat, can eat tobacco with impunity; but none escape the effects of the fumes. Persons suffer most from tobacco while learning to smoke. Dr. Richardson says that the spasmodic seizures are sometimes terrible, especially in boys. There is a sensation of imminent death, the heart nearly ceases to beat, and sharp pains shoot through the chest. Examination of inferior animals under such conditions shows that "the brain is pale and empty of blood; the stomach reddened in round spots, so raised and pile-like that they resemble patches of Utrecht velvet." The blood is preternaturally fluid, the lungs are as pale as those of a dead calf, and the heart is feebly trembling. Such is the primary action of one's first cigar.

After a time the body becomes accustomed to the influences of the poison; and with the exception of constant functional disturbances (owing to the excretory organs, notably the kidneys, being compelled to do work not essential to their duties), no distressing results are felt. There are numerous instances where the evil effects are scarcely appreciable, the physical and nervous constitution of the smoker being capable of resisting the influence. In many cases copious salivation attends smoking, and in this circumstance the opponents of tobacco have found a strong argument. Still, either to expectorate or not to do so, is a choice of evils. In the latter case, the result is to swallow the saliva charged with poisonous matter; in the former, the saliva needed to prepare food for digestion is lost, and besides, as it contains salts of lime in solution, the effect is to produce large formations of tartar on the teeth.

"Smoker's sore throat" is a special irritable state of the mucous membrane induced by cigar smoking, which soon disappears when the habit is broken off. Tobacco smoke does not produce consumption or bronchitis, but it tends to aggravate both maladies. Its effects on the organ of sense is to cause, in the extreme degree, dilatation of the pupils of the eye, confusion of vision, bright lines, luminous or cobweb specks, and long retention of images on the retina, with other and analogous symptoms affecting the ear, namely, inability to define sounds clearly, and the occurrence of a sharp ringing sound like that of a whistle or a bell.

Its effect on the brain is to impair the activity of that organ; to oppress it if it be duly nourished, but to soothe it if it be exhausted. It leads to paralysis in the volitional and in the sympathetic or organic nerves, and to over-secretion from the glandular structures. Science was not wise enough to prepare so formidable an indictment as this against the nicotine weed in King James' time, else that monarch might have had better ground than his personal dislike for stigmatizing the habit of smoking as "a custom loathsome to the eye, hateful to the nose, harmful to the braine, dangerous to the lungs, and in the black stinking fume thereof, nearest resembling the horrible Stigian smoke of the pit that it bottomless."

What is the end of it all? Effects on individuals likewise affect communities, these in turn influence the nation. No person who smokes can be in perfect health, and an imperfect organism cannot reproduce a perfect one. Therefore it is logical to conclude that, were smoking the practice of every individual of a nation, then that people would degenerate into a physically inferior race. It would follow, moreover, that, in those countries where smoking is most practiced, a lower physical, and a consequently lower intellectual development must be found. Such, we think, will be conceded to be true of Spain, of Cuba, of Portugal, of Turkey, of Greece and of the South American countries, where those who are addicted to the habit vastly outnumber those who do not smoke.—Scientific American.

[In a subsequent article on "Detoxicated Tobacco," replying to a correspondent who "asks whether there be not some method whereby tobacco can be rendered innocuous and yet have its agreeable aroma preserved," the Editor says "the fact that numerous attempts

in this direction have been made, and yet that there is no substitute for tobacco and no de-nicotinized tobacco in general use, is in itself a sufficient answer to the question. It is the combination of the poisons enumerated which produces the agreeable taste and smell, and to remove any of the ingredients seems simply to render the tobacco unpalatable. The ingredients of tobacco are separately poisonous; the probabilities are that they are collectively so in every case. But some systems are strong enough to withstand their effects either wholly or in part, and for every individual to discover whether his particular constitution belongs to this last class, involves in all cases a course of experiment in learning to smoke which is universally admitted to be one of the most unnatural, nauseous, and disagreeable experiences of human existence."]

JOYFUL NEWS FOR THE AFFLICTED. Nictaux Mountain, Annapolis Co., November 1877. Messrs. C. Gates, Son & Co.—Gentlemen I had a child that was troubled very much with worms, and by taking one half bottle of your No. 1 Syrup she was entirely cured of them. About six months afterward I was taken with the Pleurisy, and was about despatching a man for a doctor when it came to my mind to take your Syrup, which I did, and soon came round all right without taking any further medicine. I have formerly been afflicted with sore throat and Quinsy in its severest forms, and could not get any relief or cure from any quarter or any medicine man until I obtained your Acadian Lintiment, which always cures me at once. I have also known it to cure a number of friends in this neighborhood, and for my own part would not think of being without it in the house. My wife has also used your medicines for Heartburn, with the very best success. You may publish this if you wish to do so.

With great respect, W. H. MILLAR. Life is full of disappointments. We recently offered to cure a bad case of Rheumatism for a year's subscription in advance, but just as we were on the point of lifting the shroud, a sympathizing friend suggested Johnson's Anodyne Lintiment, and the money and the patient vanished instanter.

The public are cautioned against imitations of the Pain-Killer, and to be suspicious of persons who recommend any other article as "Just as Good"; many of these they make a little more profit upon, but which have no qualities in common with the Pain-Killer.



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Advertisement for Johnson's Anodyne Lintiment, describing its uses for various ailments like rheumatism, neuralgia, and toothache.

Advertisement for 'LAME BACK. WEAK BACK.' featuring 'KIDNEY'S CAPSULES' and 'POREOUS PLASTER'.

Advertisement for 'NEW BOOKS' published at the Wesleyan Conference Office, London, listing titles like 'DANIEL QUORM' and 'A PLEDGE THAT REDEEMED ITSELF'.

Advertisement for 'Hymn Service FOR THE Sunday School', listing 'Hymns and Songs, New and old, appropriate to the International Lessons for 1879.' and 'Very cheap and convenient for Schools.' with prices for music and words.

Advertisement for 'MASON & HAMLIN CABINET ORGANS', highlighting a 'GOLD MEDAL' at the Paris Exposition 1878 and listing various models and prices.

Advertisement for 'VEGETINE' medicine, claiming it will cure 'SCROFULA, Scrofulous Humor, Cancer, Cancerous Humor, Canker, Mercurial Diseases, Salt Rheum, Erysipelas, Pimples and Humors on the Face, Tumors, Ulcers or Old Sores, Catarrh, Constipation, Piles, Dyspepsia, Faintness at the Stomach, Female Weakness, General Debility.'

Advertisement for 'JOYFUL NEWS FOR THE AFFLICTED' by Nictaux Mountain, Annapolis Co., dated November 1877.

Advertisement for 'VEGETINE' medicine, prepared by H. R. STEVENS, Boston, Mass., describing its benefits for various ailments.

Advertisement for 'NEW RICH BLOOD! MAKE HENS LAY.' featuring 'BROWN & WEBB'S' medicine.

Advertisement for 'DIPHTHERIA!' featuring 'BUCKET'S BELL FOUNDRY' and 'JOHNSON'S ANODYNE LINTIMENT'.

Advertisement for 'NEW BOOKS' published at the Wesleyan Conference Office, London.

Advertisement for 'Hymn Service FOR THE Sunday School' by Wesleyan Conference Office.

Advertisement for 'MASON & HAMLIN CABINET ORGANS' with details on medals and prices.

Advertisement for 'Ayer's Hair Vigor' for restoring gray hair to its natural vitality and color, featuring an illustration of a woman's head.

Advertisement for 'FELLOWS' COMPOUND SYRUP OF HYPOPHOSPHITES' for restoring vitality and health.

Advertisement for 'BEATTY' pianos, highlighting 'R. GANS Superb \$340.00 Organs' and other models.

Advertisement for 'EAR DISEASES!' featuring 'DR. C. E. SHOEMAKER'S' medicine.

Advertisement for 'JOHNSON'S ANODYNE LINTIMENT' for various ailments.

Advertisement for 'SAVE THE NATION!' featuring 'RIDGE'S INFANTS' FOOD' for infants and invalids.

Advertisement for 'JUST PUBLISHED. BAPTISMA: A new book on Baptism' by Rev. J. LATHERN.

Advertisement for 'BLYMYER MFG CO' featuring 'BELLS' and other products.

Advertisement for 'FELLOWS' COMPOUND SYRUP OF HYPOPHOSPHITES'.

It is composed of ingredients identical with those which constitute Health, Blood, Muscle and Nerve and Brain Substance, whilst Life itself is directly dependent upon some of them.

By its union with the blood and its effect upon the muscles, re-establishing the one and tending to the other, it is capable of effecting the following results: It will displace or wash out tuberculous matter, and thus cure Consumption.

It restores tone to the nerves. It gives power of endurance and of concentration to the mind. It promotes vigor in the organs which depend for health on the involuntary muscular action, viz: the Liver, Lungs, Heart, Stomach, and Genitals.

And unless afflicted with some disease involving absolute organic loss, it will sustain the system until it reaches the age allotted to man by a beneficent Creator.

Advertisement for 'BLYMYER MFG CO' featuring 'BELLS' and other products.