became worth the builder's while who employed him to buy the sand of him, to be used in the course of erecting the building. Thus, although the contractor was paid five shillings a load to take the stuff away, he was able, when he "struck" sand, to save the expense of all horses and men, to still receive, as per contract, five shillings a load for taking it away, and then to obtain another five shillings a load from the builder for letting it stop where it was! It is not often that such pieces of good fortune occur to contractors, since the nature of the soil can generally be pretty closely ascertained before making the agreement; but sometimes the most business-like men are forgetful, and the most skilful are deceived, and then such chances happen as that by which this particular contractor obtained what he used to term his "bit of fat."

We might have enjoyed the pleasure of this gentleman's friendship for many years, had he not had an unhappy prejudice against vaccination at a time when small-pox was very prevalent.

"Vaccination is a delusion," he would say. "Look at me. I was never vaccinated, and I am constantly, in the course of my business, going into infected places; and yet I have no fear."

"Vaccination," echoed a friend of this dustman, "is a delusion. Look at Mr. Western. He was never vaccinated, and he is constantly, in the course of his business, going into infected places; and yet he has no fear."

But small-pox had marked Mr. Western for its own, and one day it arose in his neighbourhood, possibly from one of his own dust-heaps, and laid the mighty dustman low. He died, and his friend got vaccinated as quickly as possible.

Dustmen are rather particular about the funerals of their comrades, when one of them has returned to the element of his trade. By means of burial clubs, to which most of them are subscribers, there is a sum of money always at hand to furnish a funeral. Even when respect for the deceased induces them to carry the coffin on their shoulders, they indulge in a profusion of mourning coaches, velvets, feathers, and other funeral pomps and vanities. The Irish custom of "waking," too, exists in a certain degree amongst the dust fraternity, for there is usually a great deal of drunkenness about the neighbourhood, on the part of friends and relations of the dead dustman, for two or three days after he has been laid underground.

A civilising influence is much needed among dustmen, though it is possible to be too fastidious. A gentleman once complained bitterly to their employer, of the dustmen who came to his house—their language and manners were, he said, most offensive to him.

"I can easily understand it," said the contractor, "and I don't attempt to deny it. But you would hardly believe the difficulty I have in getting gentlemen of education and culture to follow my dust-carts!"

A. H.

HOW TO GET RID OF A WINTER COUGH.

BY A FAMILY DOCTOR.

OF all the many ailments that flesh is heir to, scarcely can anything more serious engage the thoughts of a medical man than this same apparently simple subject of Winter Cough. Simple it may at times appear, even to the practitioner, whose attention is so often absorbed by cases of a graver because of a more pressing nature; but simple it can seldom appear to the poor patient, for the symptoms of his aggravating complaint are often of the most painful nature, while the mind fluctuates between hope and fear with every change of weather in this fitful climate of ours.

Cases of winter cough are extremely numerous, and in all ranks of society, from the richest to the poorest, represent an amount of human suffering which is incalculably great.

Common colds, or catarrhs, are quite inseparable from a residence in these islands. Take what precautions we like, we are all liable to them at times, and it is the neglect of these common colds which is the most fruitful source of winter cough.

It is my object in this paper to describe, in language as homely as possible, the character and commonest causes of this scourge of millions—winter cough; and to suggest some plain directions for its prevention and cure. But first and foremost, there are two truths, to which I wish to call the attention of the reader:—

1. *Not only thousands, but tens of thousands of deaths in a single year, are in this country attributable, either directly or indirectly, to neglected colds.*

2. It is at this season of the year above all others—because summer with its long, bright days, will very soon be with us—that persons who are afflicted with winter cough, should endeavour by every means in their power to undermine the stronghold of the enemy, and eradicate even every trace of the dire complaint. By common-sense treatment one can do for himself in summer, what the most eminent of medical men would fail to effect, during the cold months of winter and early spring.

It is gratifying to be able to offer a patient at the very outset that most blessed of all medicines, hope, and to inform him or her that, up to a certain stage—when our treatment becomes palliative instead of

remedial—almost all cases of winter cough can be radically cured. At the same time it should never be forgotten, that this complaint is a fruitful source of many of the most deadly diseases, among which may be mentioned bronchitis, emphysema, dyspepsia, liver disease, kidney affections, dropsy, brain disease, heart disease, and tubercular consumption.

Winter cough is moreover hereditary, and tends to the production in the offspring of constitutional debility, asthma, scrofula, and consumption.

In order to thoroughly understand our subject, and the real nature of the disease we propose to treat, let us consider for a moment the structure of the lungs, and the part they have to perform in the animal economy. The venous blood returned from the various organs and tissues of the body, laden with carbon, is pumped by the heart into the lungs, where by means of myriads of capillary bloodvessels it is spread out around the air-cells, to be revivified by the air we breathe. This revivification is a simply chemical act. The oxygen of the air combines with the carbon of the venous blood to form carbonic acid (CO_2), which we exhale. The carbon is burned off, so to speak, and the blood is not only purified but heated, and thus returned to the heart, to be redistributed to every portion of the body.

The air we breathe passes through the mouth or nostrils into the windpipe or trachea, which divides into two tubes in the chest, sending one to each lung. These are called the bronchial tubes, and in the lung tissue they divide and subdivide into thousands of smaller tubes, which get less and less, till they end in what are called intercellular passages. If you look at a leafless oak-tree, it will give you some idea of the division and subdivision of the bronchial tubes. The stem or trunk of the tree shall represent the windpipe, the larger branches the larger bronchi, the smaller the smaller, and the ultimate ramifications or twigs of the branches the intercellular passages, which in an adult lung are probably not more than one-fiftieth of an inch in diameter. Now there are—and this I beg you will recollect—opening into the bronchial twiglets, or intercellular passages, innumerable little four-sided cavities. These are the *air-cells*, and are not larger than between one-two-hundredth and one-seventieth of an inch, and it is all around these air-cells that the minute bloodvessels are spread. Now, not only the whole of the windpipe, but also the most minute of the bronchi, and the air-cells themselves, are lined with what is called mucous membrane, which is somewhat analogous to the skin of the outside of the body, and like the skin is supplied with blood and nerves; and it is this mucous membrane of the air-passages and air-cells which is the seat and stronghold of the disease that forms the subject of this paper. This mucous membrane or lining is a secreting membrane. In a state of health it is always moist, the moisture or secretion enabling the membrane to throw off foreign matters from its surface; and it is therefore highly susceptible to any irritation applied to its surface. When the vessels of the membrane get turgid from any cause—in other words, when it becomes reddened and partially inflamed—the secretion from its surface is morbidly increased. This is what takes place in a common cold or catarrh, and if colds are often repeated—and especially if they are neglected—the *membrane becomes thickened*, extremely sensitive to cold, the patient becomes more and more subject to catarrhs, and the victim of a winter cough.

The thickening of the naso-pulmonary mucous membrane means, of course, narrowing of the bronchial tubes or air-passages—one symptom of which is shortness of breath, and a very distressing one this is. But a worse result follows this narrowing of the air-pipes, for in proportion to the difficulty of the outward passage of the air from the lungs, there must be a backward strain upon the delicate air-cells themselves. They get blown up, as it were, their cells get more or less attenuated, lose their elasticity, or even break down; and what is called *emphysema* is the result. This may also occur during intervals of excessive strain on the lungs, as in lifting heavy weights, and from convulsive coughing or sneezing. This emphysema is characterised by distension of the chest; the lungs encroach upon the heart's space; there is shortness of breath, increased on the slightest exertion; cough and frothy sputa, and often a dusky appearance of the countenance.

In about one-half of all the cases of long-standing winter cough, there is also emphysema.

Have I made it plain to the reader, then, that this winter cough is the result of chronic inflammation, with thickening of the lining membrane of the air-passages, and their greater susceptibility to outward irritation; and that this state of the air-tubes is one of the commonest causes of emphysema, with all its attendant ills?

Sometimes the cough never leaves the patient, summer or winter, and is aggravated by every fresh attack of cold. The cold generally begins in the throat, and creeps downwards to the chest; and it is these kinds of colds which should never be neglected. Happily, they can be nipped in the bud, in a way which I shall presently make known to you. Sometimes the cold attacks the chest at once. This is a cold of the worst form, and usually points to emphysema.

A winter cough may go on for four or five years without any shortness of breath, but emphysema is sure to come at last; and the poor sufferer's state becomes indeed pitiable. People who are liable to catch cold should never forget that the influences most likely to produce an attack are as follow:—1. Sudden changes of temperature. 2. Damp and foggy atmosphere. 3. Exposure to draughts, or cold cutting winds. 4. Getting wet. 5. Wet feet. A neglected winter cough, gradually extending to the lungs, destroying the efficiency of the air-tubes, and producing emphysema, leads most certainly to death, if not cured; the air-cells become thin, attenuated, badly nourished—rotten, as it were; and there is, consequently, insufficient aëration of the blood, which induces disease of the kidneys or liver, and ends in dropsy, which ends in the grave.

The reader, if he be afflicted with a winter cough,

may think this a grave way of looking at matters; but the surgeon must cut deeply who wants to heal, and I should not consider my duty half done, did I not place the matter of winter cough in its true light.

Now as to the treatment of this complaint. On the plea that prevention is better than cure, I think I cannot do better than show you the means whereby you may almost infallibly nip a common cold in the bud; and you know if there were no common colds, or if they were not so universally neglected, there would be no winter cough.

On the very first signs of having caught cold, you must get your chemist to give you two bottles of medicine—a clear mixture, and a white. The white mixture is composed of five grains of sesqui-carbonate of ammonia, with five minims of liquor of morphia, in one ounce of almond-milk, to a dose, and is to be taken every three hours, all day. The clear mixture is simply the liquor of the acetate of ammonia; and of this, three table-spoonfuls in cold water are to be taken after you are in bed, and well covered up with one or two extra blankets. Next morning you are to get up and take your food and go about your work as usual, but continue the white mixture, one day only, longer; and in the evening take a compound colycinth pill. If the cold, instead of being in the head, should appear to be deep down in the chest, you must also put a large mustard poultice on the front of the chest, one night, and another between the shoulders the next, and use the following as a steam inhalation: ten grains of the extract of conium, a dram of Friar's balsam, and half a dram of sal volatile to a pint of hot water. Inhale the steam for twenty minutes, morning and night. This simple treatment is recommended by the physicians to the Royal Hospital for Chest Diseases; and I have often known it succeed as if by magic.

It is a fact well known to medical men, that at least two-thirds of all the cases we see of winter cough are brought on and aggravated by fresh colds. If we could only avoid these entirely, Nature would herself effect a cure in the thickened mucous membrane of the air-passages.

It should therefore be the special aim and object of sufferers from this complaint to guard themselves in every possible way from influences which produce colds. At the same time I wish it to be distinctly remembered, that plenty of out-door exercise and activity of life is essential to the cure of a winter cough. By no means cuddle yourself up in the house all the winter. By so doing dyspepsia is induced, biliousness and low spirits, and you become a mere dreary hypochondriac, no pleasure to yourself or anybody else. Your occupations in life, however, and your amusements, will necessitate your often being exposed to sudden changes of temperature, and these you must take precautions against by wearing good flannel next the skin, summer and winter, with only a difference in the thickness. Never forget, either, that it is not the chest alone you must protect, *but the limbs as well.*

If you are a lady, and compelled at times to wear a low-bodied dress, never be without that comforter, which I believe you call a "cloud," made of fine Shetland wool. Never hesitate to get inside this cloud when passing from a hot room into a draughty corridor, or even when sitting in a draught.

Subjects of winter cough should, in cold weather, carry a metal wire respirator in the pocket, not to wear constantly, but only whenever there is occasion, especially *in fogs and damp air.*

The neck should be lightly covered, and not too closely muffled with warm wrappers.

Always have a fire in your bed-room in cold weather. It need not be large; only remember that many a one has caught cold, of a most deadly character, by leaving a warm parlour and going to bed in a bleak, cold room.

Let your external clothing be likewise warm and comfortable, and suitable for the weather, without being too heavy and oppressive.

Need I warn you against cold and wet feet? Wear the warmest and softest of socks, and do not forget there are such things as cork soles, or horsehair soles, which may be worn with advantage.

Lastly, take precautions against getting wet clothes by never going abroad, even in summer, without a light waterproof overcoat—*not india-rubber;* and never sit in a draught when perspiring. Make a point of walking leisurely to meet your train, so as to avoid sitting down in a state of perspiration. The railway companies are not accountable for one-third of the deaths which annually result from travelling by train.

It would be impossible in a paper so short as the present to mention the medicines to be used in the cure of a winter cough: indeed they would vary almost with every case. Leave the choice of medicines, therefore, to your own medical man, who doubtless knows both your constitution and diathesis. I may state, however, that temperate living will be greatly in your favour, and the occasional use of tonic medicines such as quinine and iron and zinc; and now and then an aperient in the morning, of which the best and handiest is Friedrichshall mineral water. Counter-irritation, in the shape of a large blister to the chest, when the breath is very short, often acts like a charm. Hot fomentations and stimulating liniments applied as near to the seat of the cold as possible must not be forgotten, and inhalations of tincture of lobelia or stramonium or benzoin often do much good, and relieve the cough. If coughing always comes on when the stomach is empty, five or ten grain doses of the nitrate of bismuth have an excellent effect in stopping the fit.

Wine is good in moderation, so long only as it does not interfere with digestion. If it does, stop it.

The last remedy to be mentioned to cure a winter cough is change of climate. Unhappily this is beyond the reach of the large majority of patients; but he who can afford the time and go to the expense, should not hesitate to try one winter, at least, in some one or other of the many cosy little nooks to be found on the southern shores of our own islands. Farther from home he need not go.