

chased because it was knocked down at next to nothing; there a chair, a wonderful bargain too, but in a totally different style from the table; the carpet wholly at variance with the covers; the room, like the dress, lacks charm, because harmony in details is absent.

Now let us turn to the engraving of a travelling dress, which will be found specially useful, because at this season of the year every one is on the wing. There is no doubt about the merits of serge as a material for useful costumes where wear-and-tear are contemplated; but for the present serge is giving place to a fine make of vicuna cloth, which is soft and light, and capable of being draped in most manageable fashion. It has been introduced in quiet browns and stones, and in the deep claret shade that is to be worn next winter. There are many forms of travelling dresses, but those in the best taste are short, and made up in a quiet unpretentious style, in which the conspicuous has been studiously avoided and the appropriate as carefully studied. Wearing out old clothes and the "anything will do" style is never more out of place than when travelling. If mountaineering or long walking excursions are meditated, a vast amount of comfort and even of health depends

on the clothes worn. Combination under-garments are advisable for a tour, for cumbersomeness should be avoided. The short costume with jacket should be of either serge, bège, or ladies' cloth; flounces are in the way when climbing; and kilt-plaiting comes to grief too often on level ground to be adopted on the mountains, besides adding more weight than is necessary to carry. The best dresses are those made of the lightest and firmest materials, with the smallest number of pieces. Fringe and trimming generally should be avoided, with the exception of simple binding and stitching on the material itself. There should be no bows to drop off, no looping to give way; substantial buttons firmly sewn on; easy, well-fitting boots, with broad heels; new stockings, so that there be no unexpected fractures; undressed kid gloves; and a dark hat, guileless of feathers or any trimming that would spoil under an unexpected shower of rain, are one and all to be recommended. The illustration we offer is not a tourist's costume, but rather one for travelling by rail, or boat, or coach. It is made of wood-coloured vicuna, and is trimmed with silk of a darker shade. The hat matches it in colour, and has a thick gauze veil entwined round the crown.

THE WOODS IN AUTUMN

A SONNET.

FLASHES of gold that fleck the sober grey;
Dark ruddy tints that crimson in the light;
Soft streaks of silver glimmering pearly white,
Amid the russet browns half hid away;
Pure green of spring that lingers while it may;
Patches of ivy-foliage dark as night;
Rich purple shades that peep out from the height:

Such crown with glory the September day.
Oh, autumn woods! I lie beside the stream
That winds you round about so lovingly,
And rapt in sense of wondrous beauty, see
How vain must be ambition's lofty dream
To rival tints like yours, or dare to trace
Your perfect harmony, your perfect grace.

G. WEATHERLY.

HOW TO EAT TO LIVE.

BY A FAMILY DOCTOR.

THE man who attempts to preach against any one of the many vices or errors of the age has, I fear, a very thankless task to perform. I am fully aware that my present paper will be read by many. I am fully aware that many will read it, and having read it, dismiss it from their thoughts for ever. Believing this, I should have but little heart to write, did I not remember that there are always in the world an intelligent minority, who have the good sense to accept and profit by good advice when offered to them.

Now there are two things that have long been patent to me; the first is that the larger proportion of human beings, young and old, rich and poor, eat most un-

reasonably, and that their doing so tends to shorten their lives, and to keep them in a state of anything but health and happiness while they do live. The second thing is, that the change from an ill-regulated to a well-regulated diet often enables a person, whose previous existence seemed one long toil, to feel strong and light-hearted, and to thoroughly enjoy life as life ought to be enjoyed. Before, then, giving any hints how best to eat to live, let me in a few plain words answer the query—Why do we eat at all? I read in some paper, a few days ago, that a certain wiseacre of a Yankee has been making experiments on himself, to prove that eating is only a habit. He has been able so far to dispense with food, that a week's starvation seems rather to agree with him than otherwise. Well, and there

was once a silly old Scotchman who tried experiments of a kindred nature—nay, not on himself, he was far too “canny” for that—on his “auld gray mare.” There is little doubt, too, but that they would ultimately have been crowned with success *had she lived*, for he had taught her to subsist upon three straws a day.

The constant changes going on in our systems, and the constant waste of substance from thought and action, imperatively demand the injection of sufficient food to repair the tissues and keep up the animal heat. But not only must the food taken be sufficient in quantity for our wants, but it must contain the four constituents of healthy aliment; these are the aqueous, the saccharine, the albuminous, and the oleaginous. Milk is a good sample of a perfect life-sustaining food, being composed of water, sugar, albumen, and oil. Now it must be evident to every one that as a large portion of our bodies (four-fifths) is composed of water, which is constantly passing off in the form of vapour, our food must contain a due proportion of the aqueous element. The albuminous portions of our food are economised for the purpose of building up certain tissues, such as the nervous and the muscular. The oleaginous are indispensable as heat-givers, and also to help to nourish the tissues, and keep up animal force and motion. The sugars and starches, on the other hand, are wholly heat-givers. In addition to these, various salts are found in the blood, which must be supplied from the food partaken of, and the supply must be constant, owing to the fact that the body is continually parting with them, and because they enter into the formation of bone, muscle, and nerve. The salts I refer to are the chloride of sodium, or common salt, and various phosphates which fortunately are plentifully found in the bread we eat, and in vegetables, hence the value of the latter. I ought also to mention what are known to physiologists as the *complemental foods*, such as coffee, cocoa, tea, &c. Taken in small quantities, these are said to hinder the destructive assimilation of tissues, and their use—not abuse—not only comforts and calms the mind, but also renders all kind of labour less fatiguing than it would otherwise be.

In our choice of food, the appetite or taste may usually be followed as a pretty safe guide. “Nothing,” says Montaigne, “hurts me that I eat with appetite and delight.” There are, however, one or two exceptions to this rule, for the very articles which we are most fond of, sometimes tend to produce disease. Obesity, for instance, is now-a-days looked upon as a disease. Admitting that a certain amount of fat may be taken as a sign of good health, nothing in my opinion could be conceived as more burdensome to the bearer, or more unsightly in the eyes of other people, than a body over-laden with adipose tissue. A corpulent man or woman is seldom active either in body or mind, and obesity certainly does not conduce to longevity. I will not go so far as Lord Chesterfield, however, and say that fat and stupidity are inseparable companions, for the simple reason that I know many very clever people who are quite obese. Rather let me give my fat friends a hint or two, what to avoid eating

if they wish to reduce their “huge hills of flesh.” Here, then, is Banting in a walnut-shell: partake of just as little fluid of any kind as you can with comfort, avoid sugar or molasses, fat meat or butter, pastry or potatoes, bread, or milk, or beer. What, then, are you to eat? you ask. Let your breakfast consist principally of animal food, cold meat or lean chop, kidneys or broiled fish, with just one small biscuit or slice of toast, or a crust of brown bread, and tea minus milk or sugar. Let your dinner also be of meat or fish; I care not which you choose if you avoid pork, salmon, mackerel, herrings, or eels; you may partake of any vegetable except potatoes, and any kind of poultry or game, and as at breakfast, a morsel of toast. A glass of sherry, or Marsala or Madeira, or two or even three glasses of good claret are allowable, so too is a little tart fruit, but neither raisins, nuts, nor almonds. A small biscuit may be taken with your tea (again minus milk and sugar), and a little fruit if you care for it. Let your supper also be principally flesh, and drink a few glasses of claret. Watch your health and weigh yourself occasionally, and take as medicine once a day, on an empty stomach, and in a glass of water, a tea-spoonful and a half of sal volatile and fifteen or twenty grains of carbonate of magnesia. The reduction in weight should not exceed a pound a week.

I have already stated that most of us eat most unreasonably. The greatest fault is in the quantity of food we partake of. Every one despises and looks down upon the drunkard and the sot, and very naturally too, but what shall we say of the glutton? Gluttony, indeed, is such an ugly word that I hardly like to use it, and shall substitute the term inordinate eating. Inordinate eating, then, is a vice that rides rampant in our midst. It is a vice that annually carries off its tens of thousands of victims. It is a vice that, in conjunction with intemperance in drinking, bad air and impure water, tends to degenerate the age in which we live. It not only shortens our lives by producing, ultimately, dyspepsia, that forerunner to many scores of painful and deadly ailments, but it affects deleteriously the existence of our offspring, for the progeny of the glutton can only be puny, feeble in mind and inactive in body. The wise man, then, will ever eat and drink in moderation, nor suffer the gratification of his appetite to become the means of damaging his health, and I might add intellect, for the intellect of your inordinate eater is always gross.

The food we eat ought to be as fresh and pure as possible, else it cannot but be detrimental to the system. Fish, in particular, cannot be cooked too soon; and even vegetables, I always think, are more sweet and wholesome if cooked almost as soon as culled.

There are some peculiarities of taste or constitution which I need but mention, in which certain articles of diet, however wholesome they may be, not only disagree, but seem to act as veritable poisons. Well, this but warns us to study which of the different kinds of food we consume agree with us, and which irritate the stomach. We soon get old enough to learn what kind of aliment is best fitted for our constitutions. I think I may wisely close this short paper with a few remarks

on our modern meals. The first is called breakfast, and should be partaken of about eight or nine o'clock. If we have been temperate the evening before, this meal, which *ought* to be a hearty one, will indeed be *break-fast*; if not, it will merely be a sham, sat down to for fashion-sake. If you have been out of bed and in your bath by seven or half-past, if you have not slept in a stuffy room, and if you have had a turn round the garden and a glass of pure spring or filtered water, you will be able to do justice to your breakfast. Coffee I think is better than tea, and good cocoa more nutritious than either. Eat whatever you have a mind to, at this meal—that is, if you are in good health; but (and I speak from experience) there is no better breakfast dish than good oatmeal-porridge, with new milk, for giving stamina to brain and muscle. You may, if you feel inclined, partake of a relish after it, a kidney nicely done, a little ham or a fried egg, with a cup of tea and a slice of toast, but woe is me for the man who needs to shiver over his tea *before* he can pass on to something solid!

From eight o'clock till two is quite a long enough interval between breakfast and dinner—no, I will not call it luncheon; and you may call me old-fashioned if you like. Now to dine well and comfortably one needs first and foremost to have a good appetite. This I will presume you have obtained without the pernicious aid of sherry and bitters, or brandy and Curaçao. One needs, too, to sit down to this most important meal with as quiet and calm a mind as possible, and to have a period of fully half an hour's rest beforehand, for heat, hurry, and fatigue will spoil the best dinner in the world, and spoil the *diner* too. Shall we take soup? In my opinion it is, especially in summer, quite unnecessary. I am well satisfied, however, that a plurality of dishes is hurtful. Change your dishes every day and you do a good thing, but abjure a variety of viands at a single meal—that is, if you care to live long and *comfortably*. There is economy also in what I advise, for the poorest man can thus afford to have one favourite dish daily. I do not think, however, that two kinds of vegetables hurt, viz., potatoes always, and something green and seasonable to go along with them. Never

hurry at your meals, for if you eat slowly you will stand less chance of eating too much. This chance of over-eating is also greatly favoured by having a variety of dishes and different flavours to tempt the palate. A nice, clean, well-laid table-cloth, with sparkling glass, a cool room, and a pleasant companion, are, methinks, essentially accessory to dining well. When I advise you to dine off one joint, I by no means forbid the use of light puddings, or tarts, nor of salad in summer time, or a few walnuts and raisins to wind up with in winter. What I do wish the reader to remember most particularly is that over-eating is most injurious, and that too many dishes do not agree with each other, and consequently produce languor, listlessness, and dyspepsia. The habit of taking brandy soon after dinner is also hurtful. I assure you that if the stomach needs any fillip of this kind, it is because far too much has been put into it.

An interval of rest, say half an hour, should be taken after dinner, before resuming work, whether mental or bodily—but do not sleep. If your dinner makes you sleepy there is some error somewhere, and you cannot be in perfect health.

I approve of tea or coffee partaken of three or four hours after dinner, but taken as a refreshment, not by any means as a meal. I do not think I ever *sat down* to an afternoon tea in my life, and I shall alter very much if ever I do.

Now as to the last meal of the day, namely, supper; you must, I think, study your own peculiar constitution with regard to it. It should not be partaken of too late, neither should it be a heavy meal, for if you lie down to rest with the stomach filled with undigested food, it cannot do you good, and your sleep will not be refreshing. On the other hand, no one, and more especially the nervous, should go to bed fasting, for nothing more effectually banishes sleep than hunger.

In conclusion I may add, that I know well enough that my proposal to change the national dinner-hour from seven to two, and to limit the number of dishes to a single joint, will be far from palatable to many; but I presume I am addressing not those who live to eat, but those *who eat to live*.

THE GATHERER.

A Gun-Cotton Rocket.

Fog-signalling has within recent years occupied a good deal of attention, and among other methods the firing of a gun—a $5\frac{1}{2}$ inch howitzer charged with 3 lbs. of powder—has met with some approval, though it has been shown that $1\frac{1}{2}$ lbs. of gun-cotton discharged in the open is decidedly more effective. It is, however, obvious that there are some situations, such as rock-lighthouses and lightships, where it is not possible to use either means, and it has been proposed to employ gun-cotton rockets for signalling from such places. A charge of gun-cotton is enclosed in the head of a rocket

which is projected to a height of, say, 1,000 feet, when the cotton is exploded, and the sound dispersed on all sides over land and sea. Rockets containing 12 oz., 8 oz., and even 4 oz. of gun-cotton have proved their superiority over the howitzer, and it is noteworthy that large charges have not so great advantage over small ones as might have been expected. Some of the rockets in an experiment were audible at a distance of five-and-twenty miles. The gun-cotton rocket having originated with Admiral Sir Richard Collinson, Deputy Master of the Trinity House, Professor Tyndall proposes to call it, appropriately, the "Collinson Rocket."