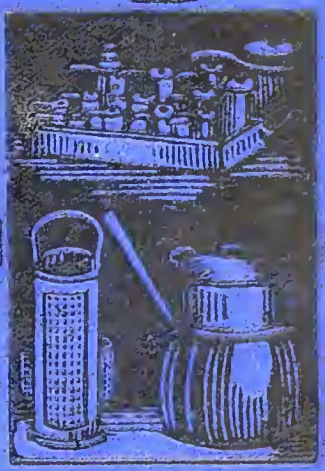
THE COOKERY INSTRUCTOR

CONTAINING FULL EXPLANATIONS ON THE SCIENCE AND PRACTICE OF COOKERY



BY

EDITH A. BARNETT.

Great Harwood

Science, Art & Technical

SCHOOL.

PRIZE

Presented to

Annie Pickering

who obtained a First Class Certificate

in Needlework

in the Examination of 1895, in connection with the above School.

MILTON HAYDOCK, ESQ., J.P., Chairman.
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October 1st, 1895.

J. T. TOMLINSON, GT. HARWOOD.

THE

COOKERY INSTRUCTOR;

CONTAINING FULL EXPLANATIONS ON

THE SCIENCE AND PRACTICE

OF

COOKERY,

WRITTEN

FOR TEACHERS OF COOKERY IN COLLEGES AND SCHOOLS, MISTRESSES OF HOUSEHOLDS, AND COOKS.

BY

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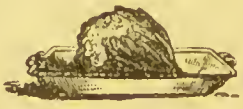


THE COOKERY INSTRUCTOR.

INTRODUCTION.

At this present stage of the world's history, it seems unnecessary to enter upon a long discourse on the value of Cookery. The question is not so much—Shall cookery be taught? as—How shall it be taught? Not long since a fashionable mania, it will soon become, we may hope, an established branch of women's education. But if educated women are to compete with the average British cook, in the manipulatory art or the practical science of Cookery, they must find some compensation for the continued practice that only the cook can obtain. It would not be desirable, even if it were possible, that the mistress of a household should spend much of her time in the kitchen, or perform offices that can as well be performed by a domestic servant worth twenty pounds a year. Other duties there are that may not be neglected for the sake of gaining some additional experience in the preparation of a custard. We do not mean that Cookery is derogatory or unbecoming to any woman where the need for it exists; but it cannot be gainsaid that a whole morning of heat, weariness, and work, is ill repaid by the production of a few sweet cakes, or a jelly that might so easily have been dispensed with, or that could have been purchased at an additional cost of half-a-crown.

The ultimate question is this: Is half-a-crown an adequate sum to repay the cost of time, use of utensils, fuel, loss of temper, not to mention the outlay on the education of the fair cook?

Suppose that one hired a manager for some department of a business. I apprehend that it would not be necessary that he should be able to perform each operation included in it with the same dexterity as the workman who spent his life in doing nothing else. The important thing is that he shall be able to judge of each thing produced, discover its faults, suggest their remedy, provide for the greatest economy, and the best subdivision of labour. More than this, he must superintend the buying of all things connected with his business, should have an intimate knowledge of market prices, and of the quality of each separate article.

It is with a conviction that this is the needful knowledge for mistresses of kitchens, that this book has been written. Scores of Cookery books exist, merely compilations of recipes, with little or nothing on the reason why those recipes are as they are; and where reasons for recipes are given in one place, they are often apparently contradicted in another. Furthermore, in all modern Cookery books an explanation is given of the hardening of albumen, and its application to the boiling of meat. Scientific reasons are thus good sometimes—why not always? If it is useful to have a reason for this recipe, why not for the thousand and one other operations described in the same book? If science is both needless and absurd, as some assert, why waste time and paper to make this one recipe something more than an empirical rule

This book is intended for the kitchen table rather than for the boudoir. The ridiculous practice of cooking in slavish subservience to a clock and a pair of scales, makes cooking-machines, not intelligent cooks, and it leads to uncertainty and difficulty the very first time it becomes necessary to deviate from the letter of the law. The ignorant servant-girl who could grasp no rule but the rule of thumb, and who could hardly write her own name, is fast becoming extinct, and is replaced by a woman of some education, who is apt to feel she has a soul above pots and pans. To her, so far as she is educated, a glimpse of the science of her profession may prove a boon, and lift her out of the depths of unreasoning drudgery.

Lastly, it is hoped that it may be useful to the now numerous company of teachers of Cookery. Whatever the rest of the world can afford to do, they, at least, should know every inch of the ground on which their teaching is built. Perhaps they may find something to help them over the hard places at the beginning of their journey.

The chapter on Food and its Uses, comes, contrary to custom, at the end, not at the beginning of the book, for it is in that order that practice and science will present themselves to the workers for whom I have written.

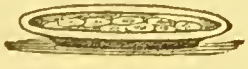


TABLE SHOWING RELATIVE PRICES OF FOODS.

One Shilling will buy	Bone.	Meat.	Total Weight.	Per cent. of Carbon.‡	Per cent. of Nitrogen‡
Rumpsteak	None	12 oz.	12 oz.	11·00	3·00
Beefsteak	,,	16 oz.	16 oz.	,,	,,
Ribs of Beef	2½ oz.	15½ oz.	18 oz.	,,	,,
"Leg of Mutton" Piece	None	19 oz.	19 oz.	,,	,,
Shin	,,	30 oz.	30 oz.	,,	,,
Leg of Mutton	2½ oz.	15½ oz.	18 oz.	,,	,,
Loin,* ditto	3 oz.	15 oz.	18 oz.	,,	,,
Neck (best end),* ditto	4 oz.	16 oz.	20 oz.	,,	,,
Shoulder, ditto	3 oz.	17 oz.	20 oz.	,,	,,
Veal Cutlet	2 oz.	10 oz.	12 oz.	,,	,,
Breast of Veal	6 oz.	16 oz.	22 oz.	,,	,,
Bullock's Liver.....	None	32 oz.	32 oz.	15·68	3·093
Salmon	1 oz.	7 oz.	8 oz.	16·00	2·09
One-third of a Fowl...		9 oz.	20 oz.	14·14	3.275
Two-thirds of a Rabbit	4 oz.	16 oz.	20 oz.	...	...
Bacon	2 oz.	19 oz.	21 oz.	62·58	1·394
White Bread.....	All eatable	...	110 oz.	30·00	1·20
Cheshire Cheese	,,	...	24 oz.	41·04	4·126
Potatoes.....	,,	...	192 oz.	81·00	0·33
Oatmeal †	,,	...	112 oz.	44·00	1 95
Haricot Beans †	,,	...	96 oz.	43·00	3·92
Hominy†	,,	...	136 oz.	40·23	1·60

* Much fat.

† Artificially dried. Reckon half as much again for the water to be added.

‡ Taken generally from Payen's calculation, quoted by Dr. Pavy.

CHAPTER I.

RULES FOR KITCHEN AND SCULLERY.

HOW TO COOK.

1. **Need of Order.**—Order and common-sense are the two things needful. With these, great things may be accomplished, spite of all difficulties; without them, mishaps multiply, and every mishap becomes a disaster. Remember that you cannot be a good cook, or even a passable one, without both these qualities, and that they come to those who work for them.

2. **Cleanliness.**—Dirt is matter out of place, one form of disorder. Let the kitchen, and all that it contains, be spotlessly clean. Never put away anything dirty, so that you may run no risk of finding your utensils unfit to use at the critical moment in your cookery, when hesitation means failure. Do not imagine that you will have more leisure for cleaning to-morrow than to-day. Every day is equally short, and in putting off your work you resemble a man with a fixed income who every day spends too much, thinking to pay his debts to-morrow.

3. **Tidiness.**—Have a place for everything, and let everything be in its place. At certain stated times look over your stores, and replenish those that are low, or you run a risk of falling short of some important material when you can neither afford the time to replace it, nor the annoyance of sparing it. It is bad economy to go without a thing because of your own forgetfulness, just as it is the best economy to go without a thing because you can't afford it. She must be a poor house-

keeper who keeps her stores low to put herself out of the temptation of using them; and yet it is a common argument in favour of an empty store-cupboard, that one cannot use what one has not.

4. **Punctuality.**—A time for everything, and everything in time. When you begin your cookery, spend a few moments in thinking how long each thing will take—(1), to prepare; (2), to cook; and settle with yourself in what order you will take them. If you have many dishes and a bad memory, write down your order of battle upon paper. A simple plan of this kind insures punctuality, and cooks everything to a point.

5. **Begin Betimes.**—Very few dishes can be hurried without being spoiled, and many cannot be hurried by any possible means. If you have a large dinner to cook, prepare over-night, or early in the morning, everything that will not be spoiled by keeping. For instance, suet may be chopped and bread-crumbs sifted, vegetables washed, and raisins stoned.

6. **To Try a Fresh Recipe.**—Read it carefully through before you begin work. Then place on the table all the ingredients you require, so that you need not run to the cupboard with floury or greasy fingers. Weigh and measure everything, and follow out the directions exactly. Then if you succeed you can count upon success next time; if you fail, you may improve the recipe for the future. Is the recipe too expensive or too plain? Then drop in a large portion of common-sense, and be sure where you mean to differ from it. Haphazard is the worst of ingredients; common-sense improves every dish.

7. **A Reason for Everything.**—There is a reason for or against everything that you do: try to find it; and when you have found it, you will make your own recipes better than anyone can make them for you.

8. **A Good Cook Economical.**—Any ignorant girl can waste, and all stupid people hold extravagance to be a mark of superiority. But a clever cook feasts where another would starve, and finds a use as well as a

place for everything. Effectual makeshifts are among the most useful articles of a cook's stock-in-trade. For economy's sake, then, make the parts of your dinner fit together, so that the superfluities of one dish provide the necessaries for another. If you wish to spend a given sum, you will so get a better dinner in exchange for it; if economy is your first object, the need for so doing is the greater.

9. **Need of Painstaking.**—Do not neglect to take pains over every trifle; never say, "That will do," until you are quite sure it is impossible for anyone to do better.

UTENSILS IN COMMON USE.

10. **Keep Utensils Clean.**—Clean all pans as you go on and put them away; if it is not possible to do this, take care that the dirt on the saucepan does not get hard and caked, while it waits its turn to be scrubbed. Fill it with water at once; if it is burnt, add a piece of soda, and set it again on the fire to boil. This trifling care saves much time, and saves the saucepans also. Saucepans should be cleaned both outside and inside. If they are black and dirty inside, everything cooked in them will have an unpleasant taste and a bad colour. If they are dirty outside, fuel is wasted, because the heat does not get through them so soon as it would do if they were bright, and saucepans are spoilt because the soot gets red-hot and burns the bottom of the pan. Where a close range is used, there can be no reason why pans should not be as bright as they were when they came out of the shop; and if you must cook over an open fire, you can still do your best to keep them so. A saucepan that has rust, or even a little dirt in it, will prevent any jelly or soup from being clear.

11. **Iron Saucepans.**—These are often tinned inside, but not always. They must be tinned if they are to be used for white vegetables or sauces, as iron spoils

the colour. The tin lining melts if the pan is used for frying or roasting.

To clean iron saucepans you need a cloth, a saucepan brush, or a bunch of twigs, some soap, sand, and hot water with soda. Fill dirty saucepans with water as soon as they are done with; if they are burnt, add soda, and put on the fire again. Scrub the inside with the brush and with sand and soap, until it is quite bright, and no specks remain. Scrub the outside also, and remove all the soot. Do not use your hand in place of the brush. It is not so effectual, and it makes the hand hard and rough, and wears down the nails, with no better result than to unfit you for the more delicate operations of cookery. A few links or a square of steel chain is, perhaps, the best saucepan scrubber, and never wears out. Then rinse the pan thoroughly, scrub it again lightly with soap to remove the black, wipe with a cloth, and turn it upside down on a rack or shelf. Clean the lid in the same way, and do not put it on the pan, but hang it up on a nail; a covered pan turns rusty. An iron saucepan, however clean, is not to be used for delicately-flavoured sauces, or for beef-tea or milk, or for anything that should be perfectly white.

Iron lined with enamel may be used for all such purposes. It retains heat long, and therefore not only is apt to boil over, but continues to do so after it is removed from the fire. For the same reason, it is apt to burn. Care is needed to prevent the enamel from becoming overheated and from being chipped off. The enamel must be scrubbed and *kept* white, or it keeps all its own drawbacks, and gets, in addition, those of unlined iron.

12. **Tin Saucepans.**—These are very low-priced articles, rapidly conduct the heat of the fire to their contents, and, if kept perfectly clean, may be used for many purposes for which iron is inadmissible. Their shape, however, is inconvenient, and they are apt to rust round the bottom if not carefully dried. Jellies, soups, sauces may all be made in tin, if nothing better is at

hand; but as tin is thin, and a rapid conductor of heat, these saucepans burn quickly.

Scrub with hot water, soap, and soda, inside and out, until perfectly bright. A little sand or a few wood-ashes can be used if necessary. Dry perfectly with a cloth.

13. **Copper Saucepans.**—These are necessary for first-rate cookery. The heat penetrates them slowly, and their contents are not liable to burn or discolour. Omelette pans and sauté pans (used for frying cutlets, etc.), are best made of copper. All copper pans must be tin-lined, and if the tin wears off it must at once be replaced. Copper rust (verdigris) is highly poisonous, and food cooked in copper, especially acid fruit, has often been known to produce symptoms of poisoning.

Scrub inside and out with soap, sand, soda, and hot water, until no black specks remain. Then scrub the inside with soap and water. Next take the used skin of a lemon or a rag wetted with vinegar, and dip it in sand; polish the copper part only, the acid discolours tin. Lastly, rinse well in water, and dry at once thoroughly on a cloth. The copper discolours if left wet.

Any acid will do instead of those recommended, but these are not poisonous, and therefore are better than oxalic or muriatic acid, commonly used in kitchens.

14. **Earthenware Saucepans.**—The best substitute for copper is earthenware, but it is not as much used as it should be. The thin brown porcelain, white-lined pans are only to be used on a closed stove, since they crack with great heat. For all delicate cookery they are to be recommended, but they are too fragile and costly for every-day use. The common brown earthenware pipkin, similar to a flower-pot glazed inside, is equally good, much cheaper, and more durable. They can be used for all purposes, and do not break on a moderate open fire.

They need only washing like crockery-ware. They are now made in various shapes and sizes, with and without lids, for pot-au-feu, sauces, stock, etc., and cost but a few pence.

15. **Frying-pans and Gridirons.**—Do not wash these utensils, but wipe them with a cloth while hot. If burnt, they must be scraped, scrubbed or rubbed with a crust of bread until quite clean. Once burnt, they will burn again.

16. **Omelette Pans.**—These are made of earthenware, of tin, and of enamelled iron, as substitutes for copper. They must not be washed; if they are, the next omelette will stick.

17. **Baking-tins.**—These tins should never be wetted inside, and should be kept separate from the tins used for steaming light puddings or for moulding jellies, since jelly-moulds must never be greased. Scrape and wipe while hot, if needed.

18. **Sieves.**—These are made of wire, hair, or of fine cloth, called tammy sieves. Wire is cheapest, most durable, and oftenest useful. Hair sieves are used for superior cookery, where metal might give an unpleasant flavour, or where something finer than wire is desired. Tammy sieves are needed only for delicate preparations, and are not met with in ordinary households.

They must be cleaned with a brush, washed in a stream of water, and thoroughly dried, as if put by wet they are apt to rust, and soon wear out. Cloth sieves left wet, rot, and give a mouldy flavour to whatever they are used for.

19. **Pasteboards.**—All wooden articles must be scrubbed with a brush, sand, and soap, along the grain of the wood, not across it. Very hot water makes the wood yellow. Do not put wet wood to dry in front of hot fires, as it will crack and warp. Marble pasteboards are used for pastry, because it is essential that the pastry be kept cold. Glass rolling-pins are good for the same reason, and a straight wine-bottle, empty, or half-filled with salt and water, is a good makeshift.

20. **Wooden Spoons.**—Two or three are absolutely necessary to the furniture of all kitchens, to be used instead of iron, for sauces, vegetable soups, mixing of puddings and cakes—in fact, everywhere that lumps

of flour are to be avoided, and the metallic taste of iron is undesirable.

21. **A Cook's Knife** (see Plate II.).—Another inexpensive luxury that might with advantage be introduced into all kitchens, for chopping, filleting fish, and other operations.

Kitchen paper must be kept in readiness. Any paper will do that is not written or printed upon. Whitey-brown paper is the best.

22. **Kitchen Stoves.**—It is much to be wished that all kitchens were provided with close stoves rather than with the old-fashioned open grates, that burn much fuel with little effect, throwing the heat into the room, up the chimney—anywhere, in fact, rather than concentrating it upon the articles to be cooked. An open fire spoils saucepans, because it covers them with soot, and overheats their sides. The cook's work is trebled if the saucepans are kept properly bright without and within. Moreover, the contents of the saucepans are often smoked or burnt. It is hardly possible to cook very well unless upon a close stove, or, what comes to the same thing, a gas stove, where the heat can be nicely regulated.

All stoves, no matter of what sort, must be kept bright. A dull surface absorbs heat instead of radiating it, and so fuel is wasted in a badly-cleaned stove. To clean a grate, the ashes must first be raked out, and the dust carried away, the cinders kept. Next, the flues must be swept down, and any grease spots must be rubbed off. Then the stove must be blackleaded, working from the top downwards, with the blacklead not too wet, as that makes it difficult to polish. Last of all, it must be rubbed until it is bright, with a dry brush, the dust brushed off, and the bright parts rubbed with emery paper.

23. **How to Lay a Fire.**—Remember that the fuel will not burn unless plenty of air gets to it. Burning means combining with the oxygen of the air; the chemical name for burning is oxidation, and the fuel

cannot combine with that which is not present, or with that which is unable to get to it. Many of the common ways of lighting a fire are bad, because they keep the air away instead of allowing it free access. The paper is folded and packed close at the bottom, the wood is laid piece upon piece, with hardly a chink between, and the coals, dust and all, are shovelled over to fill up any chance interstices. The paper should be lightly crumpled, between each stick should be a space for the passage of air, and the coals and cinders on the top must be few and far between, not put on as if the great thing were to fit as many as possible into a given square. When the fire is lighted, there is one important fact—"Smoke means wasted fuel." Whenever a fire smokes, some of the heat is lost that should be got out of the coal to cook with. Therefore the best way of heating the stove, and also of economizing fuel, is to use the coal in such a way that there shall be the least possible amount of smoke. Coals should be put on little at a time, and often, not a scuttleful thrown on a fire nearly extinguished. That large amount of cold fuel cools the stove, so that nothing will cook for a time; then afterwards the heat is so great that everything burns. One great secret is to keep an *even* heat in your stove.

24. **Small Close Stoves.**—The kind that stand in a room are best and most economical of all. They will not burn large lumps of coal, nor will they heat if the fireplace is crammed with fuel. The best of them will burn any sort of fuel, with that one exception, and it would be of advantage to the community if these stoves were more common than they are. The flues must be swept every day with a brush, as they will not burn if these are choked. It is no exaggeration to say that a good cooking stove soon pays for itself out of the coals it economizes, not to speak of the economy of time and temper. From personal experience, we can recommend Messrs. Brown and Green's Gem cooking stoves. The larger sizes will be sufficient for most middle-class houses.

CHAPTER II.

METHODS OF COOKERY.

25. **Modes of Cooking.**—There are six methods of cookery—baking, boiling, broiling, frying, roasting, stewing. All others are but modifications or combinations of these. There are certain general rules with regard to each that may be applied to all recipes.

BAKING.

26. **The Oven.**—Ovens must be kept clean or they will give a taste to everything cooked in them. The oven should be cleaned while hot, scraped with a knife, and wiped with a wet cloth. If anything is spilt, it should be scraped off at once, not left to burn on the shelves. The top shelf of an oven is almost always hotter than the bottom, except in the case of some gas ovens where the burner is close to the lower shelf. A large oven is better for baking bread and large joints, because the temperature is more even, and it can better be kept at a moderate heat. The heat is not let out of a large oven directly the door is open. Do not slam the door when you shut it, as this drives the hot air out.

27. **How to Bake.**—For pastry, bread, or anything that must rise, the oven should be hot at first and cooler afterwards, if necessary to prevent burning. There is air in all pastry that is going to be light, and when air is suddenly heated in an oven or elsewhere, it expands. This causes the cake to rise. If, however, the heat be not great enough to make a crust, and to bake the cake or pastry into the shape it is to retain the

air escapes, the cake falls and is heavy. Some cakes burn quickly, especially such as sponge-cake, gingerbread, and others that have much sugar in them. For these the oven must be cooler. Sometimes a piece of buttered paper may be laid over the top to prevent burning.

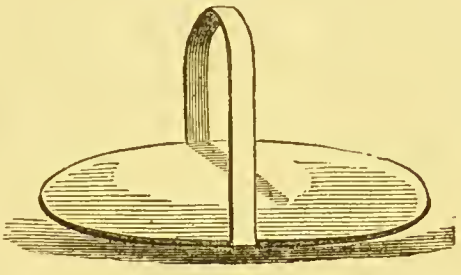
28. **Meat Oven.**—An oven that is used for baking meat should have a ventilator, and this should be open, because certain gases escape from the meat when it is heated that are apt to be absorbed into the meat again, and to make it indigestible as well as unpalatable. A flat pan of water at the bottom of the oven, in which a trivet is placed to support the dripping-pan, does something towards replacing a ventilator, inasmuch as water absorbs all gases to a large extent. In some gas-ovens, provision is made for a pan of water in the oven; it should be carefully refilled from time to time.

29. **To Ascertain the Heat of an Oven.**—No rules will stand in the place of observation and experience. A good cook will know the heat by putting her hand in. Thermometers must be used when the door is open, and register, therefore, many degrees less, (especially in a small iron oven) than they would do were they attached to the articles being baked. Put in a sheet of white paper and shut the door for three minutes. Then, if the paper is burnt and brown, the oven is too hot for anything; if it is curled up and a pale fawn colour, you may bake pastry; if it has taken no colour and lies flat, your oven is only fit for such things as require very slow cooking. Some cooks sprinkle flour on the top shelf. It will be black in a hot oven, and biscuit colour in a very cool one. A brick oven is preferred for baking bread, because brick is a bad conductor of heat, and the temperature remains equable for a length of time. A very small oven will bake well only small loaves.

30. **Baking Meat.**—Baking is a more economical way of cooking meat than roasting, because it loses rather less weight, and it takes very much less fuel and less attention. Since the greater number of dishes are

better for being cooked as soon as they are made, make up your fire and get your oven to the required heat while you are preparing the dish to be baked.

31. **The Scotch Girdle.**—They are made of iron, and should be placed on an open fire or suspended a little above it. Sprinkle some flour on, and if it browns at once the girdle is hot enough; grease the girdle with a piece of suet or dripping, and draw it back. Lay the cakes on, and when they are done on one side, turn them with a knife. The girdle must not be too hot, or the cakes will blacken before they are done. A girdle is a useful substitute for an oven, where an oven is not to be had, and should be more used than it is.



SCOTCH GIRDLE.

BROILING.

32. **How to Broil.**—Broiling may be done before the fire in a hanging gridiron, or over the fire. It is necessary to have a large, bright, clear fire, with no smoke or flame. Lay a few pieces of coke or wood over the top of the coals to clear the fire an hour before it is wanted. To broil before the fire is easier and more economical, but over the fire is better.

Whatever is broiled must be suddenly exposed to considerable heat, and not gradually warmed through. Meat, fish, poultry, and sometimes vegetables, are broiled. Your aim should be to preserve the gravy and send it to table. Warm meat gradually, and the gravy runs into the fire; heat it suddenly, and the gravy remains in the meat. This happens because in all meat, especially in the best parts of meat, such as are used for broiling, there is a substance called albumen, precisely

similar to that part of the white of an egg that is not water. When the white of an egg is slightly heated, it remains liquid, as is well known; when an egg is hard-boiled the white becomes solid, opaque, and impervious to water. The albumen in meat, fish, or fowl, solidifies in the same way when heated to a temperature nearly equal to that of boiling water; the juice is, consequently, imprisoned in the joint, and runs out only when the impervious coat is cut through upon table.

33. **Broiling Inferior Meat.**—It is useless to attempt to broil inferior pieces of meat. These contain gristle and sinew that is chiefly composed of gelatine. A teaspoonful of Nelson's Gelatine toasted before the fire shrivels and becomes dry and horny. The same gelatine mixed with liquid and heated, makes a palatable food. So with gelatinous meat exposed to dry heat, such as broiling, roasting, or frying, instead of to moist heat, such as boiling or stewing. For this reason, amongst others, broiling is a most uneconomical method of cooking, and should only be practised by those who can purchase the best meat and abundance of coals, and who then are content to know that they have lost in cooking the greatest possible amount of food.

34. **The Gridiron.**—Heat the gridiron thoroughly and then grease it with suet. Do not put the meat on to cold iron. Turn the meat frequently with a spoon or blunt-pointed knife; if you use a fork, run it into the skin or fat. After all the trouble you have taken to keep the juice in the meat it is ridiculous to make holes with a fork in order to let it out. Serve a broil immediately on a very hot plate.

ROASTING.

35. **How to Roast.**—Roasting is but broiling on a large scale, and the same principles must be observed. The better joints of meat should be selected for the same reason. The waste is greater than in boiled meat, because what is lost from the meat goes into the air instead of remaining in the broth or liquor. The fatter and

more watery the meat the more it wastes in cooking. As much as one-sixth to one quarter of the weight is often lost. Large joints waste less than small ones and a joint covered with skin (*e. g.* leg of mutton) less than a joint that has none. Considerable heat at first is necessary; afterwards, when the albumen of the surface has hardened, a less heat may suffice to finish the joint.

Roasting should be done before the fire. No other method preserves so well the flavour of the meat. The jack should be wound up before the meat is put on, or you run risk of breaking the machinery. The meat-screen must be kept bright inside, because, being bright, it will throw back the rays of the fire and economize fuel; being dull it will absorb them.

Nothing that is roasted must be sprinkled with salt; everything must be basted frequently; everything must be dry, or it will not brown. Roasting in an oven is another way of naming baking; roasters are but ovens a little better ventilated than the ordinary oven.

36. **Roasting in a Saucepan.**—Roasting is economically managed over the fire in an iron saucepan. A slow fire and an iron pot sufficiently large to take in the joint and to allow a little space round are all that is needed. Large or small joints may be cooked, but it is to small joints that the method is best suited, because they are less dried than if roasted in any other way. The saucepan is not injured if the fire be low. Put in the pan enough dripping to cover the bottom when it is melted, and then put in the joint. Put the lid on and baste and turn the meat from time to time. The hottest part is at the bottom, so care must be taken that it does not burn there before it is cooked elsewhere. The time required to roast in a saucepan is the same as for ordinary roasting.

BOILING.

37. **How to Boil.**—If the thing that you mean to boil is to be put into boiling water, have a saucepan of the right size ready at the time you want it. If a thing

has to be put into boiling water and boiled for a certain number of hours, it must be kept at boiling heat all that time, and, generally speaking, it must be covered with boiling water. Therefore when the saucepan boils empty, do not fill it up with cold or warm water, but with boiling, from a kettle kept in readiness for the purpose.

Some things should be put into cold water, some others into warm, as will be seen by the recipes.

38. **Simmering.**—To simmer means to let the contents of the saucepan bubble slowly and gently at one side of the saucepan, not at both sides nor in the middle.

39. **Boiling Water.**—Water boils when it bubbles fiercely from the bottom, and when steam is seen to escape from the lid and spout of the vessel that contains it. Anyone holding the handle of a saucepan, or, better that of a kettle, may *feel* if water boils by the vibration that is communicated to the hand. Water boils at the sea-level at a temperature registered as 212° on the Fahrenheit thermometer, and as 100° on the Centigrade. Water that simmers registers from 165° to 195° Fahrenheit. And when you simmer try to keep as near that lower temperature as you can.

40. **Boiling Point.** — The boiling-point of any liquid is the point when the heat overcomes the resistance of the air and bubbles up. Where the pressure of the air on the surface of the water is lessened (as on the top of a mountain) water boils at a less temperature. Where the pressure is greater (as at the bottom of a mine) water boils only when it reaches a temperature of 214° Fahrenheit or more. Whatever boiling-point is, to that point you can heat water. No amount of fuel will do anything more than increase the amount of steam, so that the water evaporates till only the solid contents of a saucepan are left. It is in this way that soups, sauces, and glaze are boiled down to become thicker, or "reduced" to the desired consistency.

Water mixed with salt and with some other chemicals can be made hotter than boiling water. Therefore salt is

added to boiled potatoes. For this reason, too, potatoes and other vegetables are not well-boiled on the top of a mountain, and are said to be exceptionally good in a mine or when cooked in sea-water.

41. Economy of Boiling.—Boiling is an economical method of cooking if the water that has been used be preserved for food. Meat in boiling loses as much weight as in roasting; but in boiling, that which escapes from the meat goes into the water, and need not be (though it often is) lost or wasted. One can boil on any stove and with little fuel, and, as a rule, boiling joints are cheaper than roasting joints. Cheap meat is sinewy, and sinew is a form of gelatine. Gelatine must be cooked by moist heat to make it palatable or digestible; and for this reason, as well as because of its greater economy, boiling and stewing are the methods of cookery to be chosen by those to whom money is a consideration. Where the juice is to be preserved in a joint sent up to table, the meat must be plunged into boiling-water for five or ten minutes to harden the outside, and to prevent the juice from escaping. Afterwards the pot must be drawn back or cooled by the addition of cold water and must not be allowed to boil again or the whole of the meat will be hard and tough. Ex.: Boiled leg of mutton, boiled chicken or turkey. If there is little or no juice and much sinew, so that the meat may be tender but can hardly be juicy, it is put into cold water and brought very gradually to boiling-point, then allowed to simmer slowly until done. No piece of meat is so tough that it cannot by this means be made tender. Ex.: Sheep's-head, salt-beef (where the juice is lost in salting), ham, bacon. Sometimes it is wished to extract the juice for soups or stock. Then put the meat or bones into cold water, and let it simmer some time before it boils, because the juice of meat is best extracted in cold or warm water. Bones should be *boiled* for a length of time, because their nourishment consists of gelatine, which is best extracted at a heat above that of boiling water.

All undried vegetables (except old potatoes) must be put into plenty of boiling water and kept boiling. Old carrots are apt to be tough, even after long simmering. Green vegetables simmered are a bad colour.

FRYING.

42. Use of Frying-pans.—Dry frying is done in a frying-pan. Anything that can be cooked in a short time may be fried. The pan must be made thoroughly hot, and enough fat must be put into it to prevent burning. Butter, lard, dripping, beef or mutton fat, or oil may be used; oil or butter being the only things admissible for first-class cookery. When the fat is quite hot, frying can begin, and not before. Everything that is fried must be dry, or it will not brown. It is bad economy to use too little fat, and to let the pan burn. Copper pans are best for cutlets and all delicate frying. Do not let the fire be too hot. Turn the contents of the pan carefully, so as not to break or mash them. Many things are covered with egg and breadcrumb, or are floured; this is to improve the appearance and to prevent the fat from soaking in. After frying, drain the fat off on clean paper before serving. If butter is used, it is well to heat and strain it. This separates the curd, of which in bought butter there is often a great deal. The curd is apt to burn. Uncooked meat must be, and sausages and many other things commonly are, fried in this way.

43. Saucepan-frying.—It is, however, far better, as well as more economical, to fry in an iron saucepan containing enough fat to cover whatever you intend to fry. Clarified mutton fat is best, because it less readily burns, but beef or mixed fat will do. Oil is unnecessary and expensive. Lard or butter are not to be recommended. Things that are fried in this way must, with few exceptions, be covered with egg and breadcrumb, or dipped in milk and rolled in flour, or dipped in a batter of flour and water. Without this covering the fat would soak in; the egg must cover all parts, and the crumbs must be pressed

down, or they will fall off into the fat, burn there, and discolour it. Having put enough fat in a flat iron saucepan, put it on the fire to get hot some time before you want to use it. After a time it will begin to bubble. That is because it has some water mixed with it, and having now become as hot as boiling water, it is driving all the water off in the form of steam. Fat to fry has to be much hotter than boiling water, and so long as it bubbles it is not hot enough. After it ceases bubbling, if you drop in a little cold water, it will begin to bubble again, an experiment that shows plainly the bubbling is no sign of great heat. When the fat is quite still, and a thin, bluish, filmy smoke comes out of it, do not delay to fry, or the fat being left to get hotter will burn and blacken. Then drop in your preparation, not too much at a time, or you will lower the temperature of the fat so much as to prevent your things from browning. As soon as they are a pale brown they are done, and remember that things always look darker after they have been out of the fat a minute or so. The great object is to get everything of the same colour and not too dark, and forgetting this fact, you will probably get each batch several shades darker than the last. Take the things out with an iron spoon or a fish-slice. Nothing soldered must be used or the solder will melt. That filmy smoke is not easily seen by an inexperienced cook. When the fat has quite ceased bubbling, drop in a piece of bread or parsley; if vigorous bubbling begins, and the parsley or bread be at once crisped, you may safely fry anything. The greater the smoke the hotter the fat.

44. **Frying Basket.**—If possible use a frying basket. Instead of dropping the things one by one in the fat, lay them in the basket, not one over the other, and not touching each other. Then plunge the basket into the saucepan. When the things are done drain them a minute over the pan, and take them out with your fingers. They are so dry that they do not burn, but turned out roughly on a plate they will certainly break. A basket is not merely advisable but necessary, for many

things such as break easily, and for whitebait that must only remain in the fat a very short time. (See Plate I.)

45. **To Clarify Fat.**—After you have done frying let the fat remain in the saucepan for another time, as it wastes it to pour it backwards and forwards into a basin. It will keep for a very long time if it be occasionally used. The same fat will serve for a number of different dishes, sweet and savoury. Fish is apt to leave a taste behind it; this may be in part removed by heating the fat and pouring it, while hot, into a large pan of cold water in which a piece of soda has been dissolved. The fat of course remains on the top of the water, and all the pieces sinking to the bottom can be scraped off with a knife, so that this plan purifies fat that has been several times used. Occasionally the fat must be strained, but be careful to let it first cool a little if you have been frying, or you will spoil a strainer.

46. **Economy in Frying.**—This plan of frying is economical, because it does not in the long run use so much fat as the ordinary method. Things come out of the basket dry instead of being greasy, so that the fat is not wasted or absorbed. It is also a more digestible method of frying. But no frying can be said to be either digestible or economical. Fat, strongly heated, decomposes, and the results are various indigestible products, giving rise to heartburn and other symptoms.

47. **Chops and Steaks.**—Fried chops and steaks are a more or less good imitation of broiled, and it is to be wished that this use of the frying-pan were less common.

48. **Temperature of the Fat.**—Directions are commonly given that fat for frying should *boil*. Strictly speaking it does not boil. The temperature of fat to fry should be about 385° Fahrenheit; for whitebait 400°.

STEWING.

49. **How to Stew.**—To stew is to cook anything at a moderate heat for a length of time in a small amount

of liquid. Anything may be cooked in this way, and it is the most economical method of cookery for many reasons. Whatever is lost from the thing cooked is found again in the gravy. Inferior meat and hard vegetables may be stewed and can be made fit for food. To stew it is essential to have but a small fire; and if the fire be low and the time sufficient, no other care is required to insure the success of the preparation.

In stewing the heat should never rise to 212° Fahr. (boiling water); if the pot boils only for ten minutes its contents harden: 175° is a right temperature. Keep the lid on the saucepan. A very good smell in the kitchen always means something wrong, *i.e.*, that the flavour of the food is escaping into the air.

Stewing is sometimes done in a closed jar in the oven. This is essentially the same mode of cookery, and the oven is good only because it ensures moderate, equable heat, long cooking, and no disturbance.

50. **Bain Marie.**—This method of cookery is specially suitable for keeping things hot, or where very moderate heat is desired. The roughest way is to put the preparation in a jar and to set the jar in a saucepan of boiling water. The contents of the jar always remain below boiling-point. Special apparatus for Bain-Marie is sold (see Plate I.), but the principle remains the same.

Double saucepans are also made, similar in construction to a glue-pot. The outer vessel of tin holds water, the inner, of earthenware, contains the thing to be cooked. They are known as Warren's cooking-pots, and are well adapted for slow cooking (see Plate I.) It is a modification of the bain-marie.

51. **Braising.**—Meat is sometimes braised, or, as one might explain the word, half-stewed and half-roasted. Combining many of the advantages of both methods it should be more common than it is. A braising-pan is similar to a stew-pan, with a lid made to hold red-hot coals or charcoal. Fire is applied above and below. The joint is placed in the pan with vegetables and a

small amount of moisture just enough to prevent burning. Generally it is larded, or has a slice of fat bacon laid over the top.

Without a braising-pan an ordinary saucepan may be used, and the meat placed on a layer of vegetables, covered with paper, and cooked slowly over a very little stock. Afterwards it must be browned on the top with a hot iron, or in a very hot oven, or before the fire. It may be served with only a little glaze poured over, or with a sauce of any kind, made separately, and poured round, and a garnish of vegetables.

52. **Steaming.**—To steam is to cook by exposing for a long time to the steam of boiling water. Hot closets, heated by steam are common in large establishments, and are used for many dishes that are usually boiled, the heat being easily regulated. Steamers are made to fit on the top of saucepans and are used for potatoes, rice, etc. But for puddings, which are often better steamed than boiled, it is easy to steam without any other apparatus than a saucepan.

Put in enough boiling-water to come half-way up the pudding-basin, and take care not to let it boil so fast that it bubbles over into the pudding. Fill up with boiling-water, if necessary. The basin need be covered only with a greased paper to prevent the steam that condenses on the lid from falling in.

If a steamer is used, care must be taken not to cook two things together that do not agree. Onions must not be in the saucepan, nor potatoes in the steamer. The lid must fit well and be shut down.

53. **To Sauter.**—Directions are given to *sauter* various preparations. It means literally to jump them about in a pan. For instance, to sauter potatoes they must be small, or cut small, and parboiled, then put into a stewpan with butter, and shaken over a slow fire until they take a pale colour.

CHAPTER III.

MILK AND ITS PRODUCTS.

54. **Milk.**—Milk has been called the only perfect food, because it is the one food that a man can support life upon, having nothing else. Men subsist on bread *and* water, beef *and* water, not upon any one food or drink. Milk is both food and drink, and therefore supports life. All parts of milk are valuable foods, whether it be the fat that rises to the top, known as cream and butter; or the curd that becomes solid after standing, which chemists call casein, and that most folks are better acquainted with, pressed into solid blocks and sold as cheese; or whether it be no more than the whey that is left from the cheese, or the buttermilk thrown away after churning. Milk is very commonly taken as the starting-point for a discourse on food, not only because it is the best of all foods, but because it separates itself into the various parts, and each part represents one of the classes of foods necessary to life. A tumbler of milk and commonsense teach one more about practical dietetics than many books.

55. **Composition of Milk.**—Milk naturally divides into five parts.

1. Fat, or cream, rises after a few hours' standing.
2. Curd, appears solid after a longer time.
3. Water, or whey, tasting sweet and salt because it has dissolved in it—
4. Sugar, and
5. Salts of several different kinds, both of which are left behind if all the water is made to evaporate.

As one naturally assumes that milk would not have these many parts if less would do equally well, so one is in no way surprised to learn that all food must consist of these five parts or classes, practically the same, though they receive other names. Each class must be represented in our daily food, and deprivation from one, even though the amount of the others be increased, will not fail to produce some disease of malnutrition, or, in extreme cases, death from starvation.

56. **Five classes of Food.**—Food then contains :—

1. Fat of some kind, animal or vegetable.
2. Albuminates, of which curd, or casein, is one.
3. Water.
4. Sugar, or starch.
5. Mineral salts of many different kinds dissolved in water.

Most people have bought at a chemist's sugar of milk, and know that it is a white powder, as commonly sold, looking like corn-flour and tasting less sweet than cane-sugar. It is sold for mixing with infants' food in the place of cane-sugar because it is less likely to disagree with a delicate child.

Suppose that the tumbler full of milk is boiled after skimming the cream off or not, as you please. As soon as it boils a scum forms on the top; take it off, and presently another appears. What is the scum? Something that was dissolved in cold milk and was liquid, and that has in the heat coagulated and become solid. It is *albumen*, chief of Class 2, albuminates, as its name plainly indicates.

57. **Albumen.**—We meet with albumen continually in all sorts of food, both animal and vegetable. It gets its name from its white colour (*albus*, white), and because it is found dissolved in water, and nearly pure in the white of an egg. Quite pure and quite dry, it is not white, but yellow, and looks something like gum arabic; but it is only dry when artificially prepared, never when it occurs in food. Albumen, then, is soluble in cold or

warm water, but as soon as it boils, it hardens, and is solid, or insoluble in water. Over and over again this fact meets us as practical cooks, and we find that not sometimes, but always, not in some recipes, but wherever heat and albumen are brought together, this coagulation takes place.

58. **Conclusions as to Milk.**—Common-sense may easily lead us to a few more conclusions with regard to milk. If milk were not the best possible food for a young child, it is very certain that milk would not be what it is. All young animals, except babies, are fed upon milk, and milk only, and as a rule, they live and thrive. It is hardly too much to say of babies, who don't get milk, and who seldom get milk only, that it is the exception rather than the rule when they grow and thrive. Milk, as the foregoing tables show, does contain everything necessary for food. Nothing else that can be given to an infant contains even half of what is wanted. As a rule, however, milk is not supplanted by any food that is supposed to be a perfect food, but by corn-flour, or arrowroot, or flour, or something in a packet—in short, by some form of starch. Class 3 must be sugar or starch; at best, then, starch is but one sort of food, not five. And that is distinctly "at best," not "at worst;" the worst being that no infant can digest starch of any kind, cooked in any way: so that these supplanters of milk, our perfect food, are simply no foods at all.

59. **To Keep Milk.**—Milk standing for a time becomes sour, then partly solid, and turns to curds and whey. The hotter the weather, the sooner the milk turns. If any acid is added to new milk, especially if the milk be warmed, the change takes place without any waiting. This curd or casein, then, coagulates by the action of any acid, much as albumen coagulates by heat. By the natural process of souring, acid is formed in milk, out of the milk itself, by a sort of decomposition, and it is called milk or lactic acid. Sour milk is not necessarily either rancid or unwholesome, and in many countries, is commonly eaten, and purposely allowed to become sour. If by any

means this acid can be prevented from forming, or can be destroyed as soon as it is formed, milk keeps longer. In the summer one scalds milk to keep it, and it may be kept a long time if it is boiled and put in a bottle, which must be quite full and corked while hot. As the milk cools it shrinks, and the space left beneath the cork contains no air. Another very simple plan of preventing milk from curdling, is to add a pinch of bicarbonate of soda or borax. These alkalies counteract or destroy the acid.

Suppose that you must boil some milk that you know to be sour, it will not curdle if you put in soda, more or less according to the acidity of the milk; but it gives an unpleasant soapy taste if you add too much, and it is not always easy to cover it with sugar or spice. Better to use the milk for soup, where amid salt and onions, the soda will be lost to taste.

60. **Adulteration of Milk.**—Milk is adulterated with water; seldom with anything else. It is easy to detect roughly by means of an instrument known as a lactometer, that measures the weight of a given bulk of milk. The lactometer is a sort of float of known weight; it sinks deeply into a light liquid, less deeply in a heavy one. The weight of a given bulk of any substance is its specific gravity. The weight of a certain volume of water is 1000, then an equal volume of milk should weigh 1030; if it weighs less, it probably has had water mixed with it. Sometimes when milk has a low specific gravity, it is because of the large amount of cream, for cream is, of course, lighter than milk. There should not be less than ten per cent., or one-tenth of the whole. Lightness and little cream together, mean admixture of water.

61. **Condensed Milk.**—This is cow's milk from which most of the water has been evaporated, and to which cane sugar has been added to keep it. It is probably the best food for infants to be bought in large towns where the milk supply is variable. A sufficient amount of water must be added to replace what was taken away. For puddings it is excellent, its only drawback being the excess of sugar.

62. **Drains in Dairies.**—Neither milk nor anything else will keep in a dairy where the sink or the floor is connected with a drain, as often happens. Nothing that is decomposing should be allowed to remain in the dairy. The vessels in which milk is kept must be scalded with boiling water and set in the air to dry; if this is forgotten, the new milk will soon turn sour in the old pans. A very little sour milk is enough to spoil a great deal of sweet.

63. **Butter.**—Floating about in new milk are tiny globules of fat, and being the lightest part of the milk, they rise to the top. When milk is continuously shaken these globules burst and adhere to each other in lumps of various sizes, then we have butter; it should be milk fat only, and it is good in so far as it is separated from every other part of the milk. In some parts of England the whole of the milk is put into the churn; generally the cream alone is churned. The former plan is said to make more butter, the latter certainly saves more labour.

64. **Butter Making.**—Two secrets there are for butter-making: one is, keep everything perfectly clean; and the other, keep always the right temperature. Dairy utensils must be scalded with boiling water and set out in the open air every time they are used. All wooden utensils and the hands of the butter-maker, that they may be cool and that the butter may not stick, must be rinsed first in the hottest possible water and then in cold; fill the troughs with salt and water till you use them. In hot weather the milk must be skimmed at the end of twelve hours, in cold weather it may stand thirty-six. All the cream will not have risen for the first skimming, and it may be skimmed again for economy's sake. Some butter-makers always let the milk stand to curd before skimming, and assert that the butter is sweeter as well as that more is obtained from the milk. Certainly cream is no worse because taken from curdled milk. Milk-fat cannot curdle, only the curd that is mixed with it turns sour. The cream must be between 55° and 61° of

temperature on a Fahrenheit thermometer that should be kept in the dairy. If it is too cold, the butter is long in coming, and soft when it does come; if too hot, the cream is apt to become frothy and overflow the churn. In winter the cream must stand near the kitchen fire for an hour or two, and in summer it must be set in a draught on the dairy stones, or in a pail of salt and water, or on ice. Turn the churn evenly, not by fits and starts, and butter will come in a quarter of an hour or twenty minutes. The next thing is to strain off the buttermilk, which should be kept for bread and cake-making. Then fill the churn with cold water and wash the butter until every bit of curd and of buttermilk is washed away. Badly-washed butter soon turns rancid, because the curd quickly decomposes. The salt must be dried and carefully crushed; the amount depends upon taste and custom.

65. To Keep Butter.—To keep butter add a little fine white sugar as well as the salt, and put it in a cool place under water to which a little salt and tartaric acid has been added. Butter keeps better if it be melted and strained, because all the curd is taken away, but then it is only good for cooking purposes. A mixture of melted butter and beef-fat in equal parts is good for winter use, and keeps any time.

66. Salt Butter.—This will be improved by being thoroughly washed in several waters and then in a little milk, after which fresh salt and white sugar must be added. Some manufactured butter, prepared from animal fat, is now in the market, and is not easily distinguished from the genuine article. If this butterine were sold under its right name and at a reasonable price, it would be a valuable addition to our food supply. It is palatable and nourishing, but said to be less digestible than butter.

67. Adulterations of Butter.—Butter is adulterated with water, the water being kneaded into it to increase the weight. Drops of water ooze out when it is cut, and if melted or used for frying, the bulk and weight

rapidly diminish, whilst a vigorous bubbling continues till all the water is gone. The same may be said of lard and all animal fats melted down for sale.

CHEESES.

68. **Rennet.**—In order to coagulate the milk curd for cheese-making an acid is added to the milk. The acid used is rennet, prepared from the stomach of the calf.

69. **Good Home-made Cheese (resembling Stilton).**—Take four gallons of new milk, with or without one and a half pint of cream, one breakfast-cup of finely-powdered salt. To each gallon of milk put two tablespoonfuls of rennet. The rennet prepared at home from the stomach of the calf is much less strong than the essence of rennet sold by Messrs. Crosse and Blackwell. The milk must be warm, not hot, or the curd will be hard. After two hours slash the curd with a knife, and presently take off some of the whey with a cup, disturbing the curd as little as possible. Now put the curd in a coarse cheese-cloth, and the cloth into a colander or basket to drain. When the curd is firm put it into a wooden or tin mould with layers of salt between and let it settle of its own weight, using no pressure. Cover the cheese and turn the mould every morning for a fortnight. Then put the cheese into a muslin bag (which must be dry and changed twice a week) and hang it in a dry place. When quite dry put it in a calico bag and rub it every two or three days till fit for use. May is the best month to make these cheeses.

70. **Varieties of Cheese.** — Bought cheese is made on the same principle, with as many variations of temperature and manipulation as there are varieties of cheese. The milk is skimmed before Dutch or Parmesan cheeses are made, so they have little or no fat; hence their firm texture and dryness. American, Gloucester, and many others are made of new unskimmed milk. The caseine coagulating, carries with it

the fat globules, so that these cheeses contain all the milk except the whey. Others again, such as double Gloucester, Stilton, and Gorgonzola, have extra cream added to the milk; these are both richer and higher-priced. Skim milk cheeses are the most indigestible as well as least nourishing, but all cheese contains much nourishment in a small compass and portable form. Dry cheeses are well-suited for grating and cooking. Care must be taken not to cook it too long in any recipe, as it becomes tough and leathery. Parmesan should be grated fresh, and not left to stand, as it loses flavour by keeping. All cheese should be kept closely covered, or it dries and wastes; and a cheese waiting to be cut should be put in a damp place, not in a dry, hot cupboard.

71. Cream Cheese.—This is very easily made in the summer months. Procure a small, flat box (a fig-box will do well) and bore a few holes in the bottom. Lay in a piece of calico, fill it with cream, fold over the calico, nail on the lid, tie a long string round, and bury the box in your garden, at least two feet deep, for not less than forty-eight hours. At the end of that time a cheese will be in the box and will only need drying for a week before it is ready for use. The long string is to guide you to the cheese when you take it up. The hole must be filled in, not left open, till the next box comes.

72. Devonshire Cream.—Take the pan of new milk and set it on a hot stove. The milk must not boil, or the cream will be spoilt. The heat makes the cream rise and forms a thick scum. As soon as it has risen (in about twenty to thirty minutes) take the pan off the stove. When cold, skim it. To make butter it is only necessary to stir or beat the cream in an earthen jar with the hand or a flat stick and it is made in ten minutes. A very economical method of butter-making, and a very good one.

73. Whipped Cream.—The cream must stand twenty-four hours before skimming, and is called "double cream." Put it into a large basin, keep it cool, and whip lightly and evenly until it becomes frothy. Gum water

and white of egg are added to the cream to make it stand. It is best made just before using. Add the sugar, and flavouring last of all.

74. **Devonshire Junket.**—Warm the milk as for cheese. Sweeten to taste and add a flavouring of brandy. Then add essence of rennet, and let it stand till it is curdled. Put on the top a layer of Devonshire cream and sift white sugar over. It must be made in the dish that it is served in.

75. **Cheese Patties.**—Cut a round of bread one and a half inch thick. Cut this into small rounds, and with another cutter hollow out the middle so that you have a little cup. Dip them in milk, egg and bread-crumbs, and fry them. Fill with the following mixture: two ounces of grated cheese, one ounce of butter, one tablespoonful of milk, salt and cayenne. Make the cases first, and serve the cheese as soon as it is melted, or it will be tough and stringy.

76. **Cheese Aigrettes.**—Melt two ounces of butter, add three ounces of flour and half a pint of water; let it boil fifteen minutes and stir it thoroughly. Then add the yolks of three eggs and three ounces of grated cheese. Cayenne and salt to taste. Beat it well with a wooden spoon. Last of all add the whites of two eggs, beaten to a froth. Fry in a saucepan, the fat not very hot, dropping in a spoonful at a time.

77. **Cheese Soufflee.**—Mix as directed for Vanilla soufflée (see Index), using the following ingredients: one ounce of butter, one ounce of flour, one gill of milk, salt, cayenne, two ounces of grated Parmesan, the whites of three eggs, and the yolks of two. Bake fifteen to twenty minutes in a tin, or five to ten minutes in small paper cases.

CHAPTER IV.

EGGS.

78. Of Eggs.—Eggs are sometimes classed with milk as a perfect food, and as at first appears, with good reason, since the body of the chicken is formed entirely from the substance of the egg during hatching. But egg as a food is taken minus the shell, whilst the chick is formed from the egg-shell and all ; for the shell becomes thinner and thinner, till at last, when the chick breaks its way out, it is no thicker than a sheet of paper. Egg-shells are made of phosphorus and lime ; the phosphorus unites with the oxygen of the air to form phosphoric acid, and this acts as a solvent upon the earthy matter which is absorbed, and serves to form the bones of the chick. So then egg is deficient in bone-forming material. The inside of an egg is in two parts—the yolk and the white, the yolk being in the centre and attached to the shell by two membranous cords. Immediately beneath the shell is a thin lining membrane, from which the shell can easily be separated. The white is little else but water and albumen, which receives the name that it afterwards passes on to a whole class of food from its white colour. (Latin, "*albus*"—white). The yolk contains, besides albumen and water, some saline matter and oil, that represent both fats and carbohydrates, inasmuch as there is no starch or sugar. It also contains sulphur, that forms the sulphuretted hydrogen in a bad egg and causes its offensive smell. Sulphur attaches itself to silver spoons and blackens their surface. Both yolk and

white of an egg are nourishing, and the white is often the more digestible of the two, a remark that might find an appropriate place in the chapter on Sick-room Cookery.

79. **Fresh or Stale Eggs.**—The average weight of an egg is two ounces avoirdupois. Exposed to the air it loses weight day by day, and the various devices that are resorted to to preserve eggs, are simply to prevent this loss. When a stale egg is broken, a large bubble of air is found at one end between the shell and the lining membrane. This space was once occupied by water that has evaporated through the porous shell, its place being taken by air. Air weighs lighter than water, hence the loss of weight, and it causes gradual decomposition until, in the end, the egg becomes putrid.

To see if eggs are fresh, dissolve one ounce of salt in ten ounces (half a pint) water. Fresh eggs sink, stale swim; bad eggs float even in pure water. It is to prevent this evaporation that eggs are coated with fat, gum-water, collodion, white of egg, etc.

80. **To Keep Eggs.**—It must not be forgotten that eggs speedily acquire a taste from anything that surrounds them, and that fat is apt to become rancid, while bran often turns musty. It is a good plan to keep eggs in lime-water. Salicylic acid is also to be recommended. Add one teaspoonful to a pint of boiling-water. When the water is cold dip in the eggs, and as soon as they are dry place them on shelves or racks, exposed to the air, the thicker end upwards. Fresh eggs can also be known by their transparency when held up to the light; a stale egg is cloudy and opaque.

80*. **White of Egg.**—The white of an egg is ropy and adherent, so that if several are together in a cup it is easy to pour each one out separately. This is because the albumen is enclosed in very thin walled cells or layers, that have been by some compared to the layers of an onion. When the white is shaken or beaten the cell walls break up and, after a time, it becomes a stiff white froth. Much air is mixed with it and is unable

to escape owing to the adhesive nature of the albumen. Beaten egg is used for many preparations, generally for cakes or soufflées. Air is stirred in with the egg and expands in cooking to make the preparation light. It must be stirred in very lightly or all the work of beating is undone, and it must be cooked at once or the air will escape. Eggs added to cakes have the effect of making the dough more adhesive, and therefore better capable of retaining air.

81. **Whipped Egg.**—To whip the white of an egg, put it on a clean, dry plate, add a pinch of salt and nothing else, and whip lightly and evenly all one way until the plate can be turned upside down without the egg slipping. A stale egg, or one that has yolk mixed with the white, will not stiffen. Stand in a draught, or in a cool place. All puddings and cakes are lighter and better if the whites are beaten separately from the yolks.

82. **Liaisons.** — Yolks are put into soups and sauces as *liaisons*, that is, to bind them together and thicken them. They must always be added at less than boiling heat, and not allowed to boil, or the particles of egg will be hard boiled and solid, and will not mix with the liquid. "Curdled" eggs are simply hard, not sour.

83. **Digestibility of Eggs.**—Eggs are digestible when they are lightly cooked or uncooked, indigestible when hard boiled. They are also more digestible when they are beaten, than when cooked in the shell. But not eggs only, every food is more easily digestible when it is vesiculated, than when it is solid, and therefore penetrated with difficulty by the digestive fluids. An egg should be beaten and lightly cooked for an invalid.

84. **Eggs of Domestic Fowls.**—The quality of eggs varies with the food of the fowl. Hens' eggs are commonest and also best for cooking purposes. Ducks', guinea-fowls', plovers', and other eggs are esteemed for the table, but they are ill-adapted for puddings and custards, because the white is transparent and soft, and

does not set firm. The eggs of reptiles, *e.g.*, the turtle, are also eaten.

85. **Egg Powder.**—This has been prepared from eggs by simply drying and pulverizing them. It has never been common. The egg powder usually sold is innocent of eggs, merely a sort of baking powder coloured yellow.

86. **Custard Powd r.**—This is a preparation of starch, also containing no eggs, but much to be recommended as a cheap substitute for egg-custard. Directions for using are sold with each packet.

87. **To Boil an Egg.**—The best way to boil an egg is to put it in cold water enough to cover it, and set it on the fire ; as soon as the water boils the egg is done. The time, of course, varies according to the size of the egg and amount of water. Or drop the egg carefully into a saucepan of *boiling* water and let it remain three to three and a half minutes by the clock, not by guesswork. When an egg is suddenly plunged into a large quantity of boiling water, the shell often breaks, for the sudden expansion of the contents bursts the shell. This is less likely to occur with a stale egg, because the bubble of air at the end is capable of compression. It does not break in a small quantity of water, because the temperature is lowered by the cold egg. If an egg be insufficiently boiled and broken, it can be boiled again if a splinter of wood or a pin is run across the broken end. The yolk must be intact. If an egg be boiled soft and afterwards gets cold, no boiling will make it hard. To boil an egg hard, put it in boiling water and cook it ten minutes and not longer, or the outside of the yolk turns black. Put it in cold water to cool.

88. **Buttered Eggs.**—Put a small piece of butter in a saucer or dish and melt it in the oven. Add a pinch of salt and a little white pepper, and one or two eggs, with the yolks unbroken. Put a piece more butter on the top, return the dish to a moderate oven for two minutes. As soon as the whites begin to set, serve. They should be cooked in the dish they are to be served in.

89. **Buttered Eggs with Cheese.**—Prepare a dish as above adding a layer of grated cheese, by preference Parmesan. When it is melted, break in the eggs, sprinkle a little cheese over, brown in the oven or before the fire and serve hot. May be served in the dish or slipped on to a round of buttered toast.

90. **Curried Eggs.**—Boil four or five eggs hard, when cold, strip off the shell and slice them yolk and white together. One egg should be kept in hot water uncut for garnish. Melt one and a half ounces of butter in a saucepan, add an onion chopped small, a small apple also chopped, and part of a carrot grated. Let it cook over a slow fire until tender. Mix in a basin one dessertspoonful of curry powder, a teaspoonful of flour, and half a pint of broth or water, pour this into the stewpan and stir till it boils. If necessary, reduce the sauce, which should be thick enough to adhere to the egg. Then add the juice of half a lemon and the sliced egg, warm and serve on a hot plate with boiled rice round or on a separate dish. If the rice has not been successfully boiled it may be pressed into teacups, turned out in mounds, and the curry poured round. Garnish with the egg cut in quarters. The milk of a cocoa-nut, or a piece of grated cocoa-nut is often added to a curry and improves the flavour.

91. **To make Custard.**—Take the yolks of four eggs and the whites of two, to three quarters of a pint of new milk. Mix and strain, add white sugar to taste, pour it into a jug, set the jug in a saucepan of boiling water. Stir until it thickens with a wooden or silver spoon, then pour it into a basin and stir occasionally until cold. It may be made in a saucepan over a slow fire, but must not be allowed to boil or the eggs will harden.

For flavouring, thinly-pared lemon rind, or a laurel leaf may be boiled in the custard; essence of lemon, vanilla brandy, or ratafia, should be added after. Served hot or cold as sauce, or alone.

92. **Custard Pudding.** — Line a pie dish with

paste. Mix and strain four eggs, and one pint of milk, with flavouring and sweetening to taste. Pour it into the dish, grate nutmeg over and bake one and a half hours in a very slow oven. A hot oven makes the custard full of holes, or "curdles" the egg.

93. **Savoury Custard.**—Take the yolk of two eggs and the white of one slightly beaten. Add a pinch of salt and a quarter of a pint of good white stock, or stock and cream mixed. Butter a jam pot, pour in the mixture and steam slowly for twenty minutes. To see if it is done, press your fingers on the top; it should be firm. Let it cool before turning out. Generally cut into dice and served in clear soup. The water must not bubble after the custard is in, or the custard will be full of holes.

94. **Fried Eggs with Bacon.**—Break the eggs into cups. Cut some slices of fat bacon or ham, of even thickness, and fry them in a frying pan over a slow fire until the fat is quite transparent, but not browned. It is best to cut off the rind after cooking that the slices may be flat. Put the bacon on a hot plate. Slip the eggs one by one in the pan, and let them cook slowly in the bacon fat until the white sets. Take them up with an egg slice, place on the bacon and serve.

95. **Eggs for Garnish.**—Boil the eggs hard, remove the shell, separate the yolk from the white. Cut the whites into any shape you fancy with a paste-cutter, and put them in water to preserve the colour. Rub the yolks through a wire sieve with a wooden spoon. They may be sprinkled over any dish, such as boiled chicken, mayonnaise, or put in a layer in savoury jellies. The half whites may also be refilled with yolk and set with a little gum or jelly. Sliced eggs are also used for garnish, as well as the whites whipped to a froth and sprinkled with chopped parsley, lobster-coral, pistachio nuts, etc.

96. **Eggs en Matelote.**—Poach two or three eggs in a pint of well-flavoured white stock and place them on buttered toast. Melt one ounce of butter, add three-quarters of an ounce of flour to the stock, let it boil,

then add a wineglassful of white wine, the juice of half a lemon, pour round the eggs and serve at once.

97. To make Omelettes.—An omelette may be flavoured or mixed with almost anything. The pan should be of copper, round, small and shallow. Melt over the fire a piece of fresh butter, about one ounce. Break the eggs into a basin, add the flavouring, and beat lightly with a knife. Pour the eggs into a pan over a good fire, and stir quickly and steadily with an iron spoon, so that no part of the egg sets before the rest. As soon as it begins to set move it all to one half of the pan, loosen it round the edges and at the bottom with a pliable knife or spatula, turn it over to fill the other half of the pan, loosen it again and turn it out on a hot plate. It should be begun and finished in two minutes, and when cut, the egg in the middle should be soft. It should be the shape and size of half the pan. For a beginner, a small omelette is easiest to make, not more than two or three eggs. Everything must be prepared before beginning and placed within reach, as a moment's delay is fatal to success.

"Omelette aux fines herbes" is made by the addition to two eggs of pepper and salt, half a teaspoonful of chopped parsley, and a quarter of a teaspoonful of mixed sweet herbs, by preference fresh ones. Cheese omelette has a heaped tablespoonful of grated Parmesan and a little cayenne. Cold fish, or lobster, or grated ham, or oysters (two or three chopped to each egg) may be used with advantage.

Another way is to take a fair-sized pan and put in enough butter to prevent sticking. Beat well several eggs in a basin and add a few tablespoonfuls of milk, with salt or sugar. Pour the egg in the pan as if you intended to make a thick pancake but do not turn it. As soon as it is set roll it up in the pan. For a jam omelette warm some jam and fold the omelette over. Serve at once.

The former recipe is generally preferred; the latter is easier to follow.

98. **Omelette Soufflée.**—Take two or three fresh eggs and separate the yolks from the whites. Beat the whites to a stiff froth, with a pinch of salt. Add to the yolks whatever flavouring you intend to use and stir with a wooden spoon in a round basin to a cream. Melt a very little butter in a pan and let it be hot. Mix the yolks and whites together, pour them into the pan, stir them once very lightly, keep them over the fire for one minute, or less, and then put them in a *very* hot oven for not longer than three minutes. Less time is often enough, and, if cooked too long, the omelette falls. Turn it out of the pan on a very hot plate, double it in half, and serve at once, as it falls directly it is out of the oven.

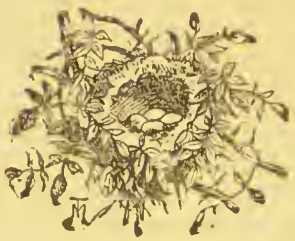
In a gas oven that is very hot underneath it is not necessary to cook it *over* the fire. It can be made without an oven, cooking it rather longer over the fire and holding it before the fire to brown, but it is not so good.

99. **Poached Eggs.**—Have a flat, shallow pan full of boiling water with a tablespoonful of vinegar. Break the eggs in a cup and slip them in one by one taking care to keep them as round as possible. As soon as the white is set take them out with an egg slice and place them on toast, spinach, or whatever you intend to serve with them. Take care that the water is quite clean and has no black specks in it. Do not let the water boil too fast, because it spreads the white about. The vinegar is added to harden the white quickly, but any other acid would do as well. As soon as it comes to boiling-point white of egg becomes solid; but it hardens before boiling-point if it is made decidedly acid, a fact that is taken advantage of in many recipes, besides this for poaching eggs.

100. **Rummeled Eggs.**—Put into a small saucepan one ounce of butter, two tablespoonfuls of milk, pepper, and salt. Prepare some small rounds of buttered toast. As soon as the milk is hot break in two eggs and stir quickly and smoothly until the whole becomes

creamy and thick. Pour it at once on the toast and serve hot. If cooked too long it becomes lumpy and hard.

101. **Snow Eggs.**—Beat the whites of some eggs to a stiff froth, then add castor-sugar and flavouring to taste. Have a saucepan full of boiling milk, drop the eggs in by spoonfuls, cook it just enough to set it, and drain it on a sieve. Make the milk into a custard with the yolks of the eggs, pour it into a glass dish, and when cold, put the snow on the top.



CHAPTER V.

FLOUR FOODS.

102. **Farinaceous Food.**—The cereals or corn-plants are wheat, oats, barley, rye, maize, millet, rice. Each of these forms, or has formed, the staple food of the inhabitants of some country, and is there spoken of as "corn." Thus in parts of America "corn" means maize, the "Indian corn" of our vocabulary; rice is the principal food of the Hindu; rye and oats once formed the staple food of the English as well as the Scotch agricultural labourer; wheat is now the corn of England. It is remarkable that wherever wheat can be obtained it takes the place of other cereals. Probably this is due to the fact that of wheaten flour alone can light bread, or vesiculated dough, be made. If a handful of wheaten flour is made into a paste and then rubbed and washed in the hands under a stream of water, a white, milky-looking liquid will pass away but there will remain at the end a part of the flour in the hands, a yellowish, sticky, elastic substance, that can be drawn out like india-rubber. The amount of this "crude gluten," as it is called, varies in different samples of flour, but if the washing be performed very carefully, there will, probably, be from eight to twelve per cent. or one-tenth of the total weight.

When bread is made of wheaten flour, gas is formed in the dough by one of several processes, and this gas makes the dough rise. The sticky, elastic nature of the dough prevents the gas from escaping into the air,

There is less, or no gluten in other cereals; the gas escapes as soon as it is formed and heavy bread results.

103. **Wheat.**—Wheat varies much according to the soil and climate that produces it. Grown in a wet season it makes bad bread. At the present time this immediate consequence is little felt, because much foreign wheat is in the market and flour is mixed to improve its quality. Alum is added to bread to make bad flour appear good rather than as an adulteration in the strict sense of the word. The hard wheat grown in hot, dry climates contains more gluten and fibrin than the soft wheat grown at home, and is therefore more nutritious. The white, milky liquid that passed away from the flour when it was washed was starch mixed with water. In all corn there is more starch than anything else, and in wheat as much as seventy per cent.

104. **Wheat Flours.**—Various qualities of wheat flour are sold under different names. "Vienna," "Snowflake," and "pastry" is very fine and white. "Households," or "Seconds," is less white and somewhat cheaper. Pollards and sharps are among brown meals, generally sold as food for animals. Bran is the outer husk of the wheat grain.

If a grain of wheat is soaked in water, it is easy, with a pair of forceps, to strip off one or more of the fine coats or envelopes with which it is surrounded. There are six envelopes, each differing from the other in the arrangement of its cells and fibres; the outer coat is covered with hairs. If a thin slice is cut straight across the middle of the grain from side to side and examined under a microscope the construction of the grain can be studied. The interior of the grain is filled with starch cells. Then there is a layer of oblong, brick-shaped cells that are known to contain a large amount of gluten. The remaining coats are more or less easily distinguishable.

The finest and whitest flour is nearly all starch from the centre of the grain, and is, therefore, not the most nourishing. Starch in its many forms is very

cheap, and so abundant that, if people get enough food of any kind they are sure to get enough starch. It is uneconomical to pay a high price for very starchy flour. Those oblong gluten cells are yellower than the starch cells, and seconds bread is yellower than the first quality because it contains more gluten.

Brown meal may be made of the whole wheat grain ground together.

Pollards and sharps are the brown part of the grain only, the white having been taken to make white bread.

The outer husk, or bran, is quite indigestible, and is valuable because it stimulates the action of the intestines and prevents constipation. There is in bran a large amount of nourishing material of various kinds, but, inasmuch as it is indigestible to human beings it is not useful as food. The other varieties of brown meal are both digestible and nutritious.

Brown bread as generally sold is made of white flour mixed with bran only, and cannot, therefore, be recommended to the working population under any pretext whatever.

105. **Maccaroni.**—Maccaroni and semolina are made from a peculiar kind of hard, red wheat mixed with water. They are very nourishing—much more so than rice, sago, and similar products. The long, straight, Naples maccaroni is cheaper than the Genoese, and, for some purposes, better. Vermicelli is a small kind of maccaroni.

106. **Oats.**—Oats, and, indeed, all cereal grains, have the same general structure, consisting of an outer coat more or less indigestible, and an inner part containing starch and albuminate. There is less starch than in wheat (sixty-three per cent.) and more fat. Oatmeal is to be compared with whole wheat meal, since the whole grain is ground, not merely the inner part.

Scotch oatmeal is considered preferable to English. It is certain that the use of oatmeal is greatly diminished in Scotland since improved means of communication make white bread procurable in most districts. In

the large towns oat-cake is eaten as an article of luxury.

107. Oatmeal Porridge is generally made of coarse oatmeal. The cakes are made of either the coarse or the fine meal. Recipe for oat-cake will be found in Paragraph 145. To make porridge digestible it must be thoroughly boiled—not less than half an hour. The less it is boiled the slower it is of digestion, and, therefore, the more sustaining, though not more nourishing. Brose is prepared by stirring the meal into boiling-water or broth. Oatmeal does not agree with some persons, however it is prepared.

108. Barley.—Barley is grown chiefly for malting. It is sold as pot barley or Scotch barley, as pearl barley, and as prepared barley. The husk is taken from the grain, which is afterwards more or less rounded by milling.

Pot and pearl barley are the same, but that the latter is somewhat rounder. Remembering that the inside of the grain is starch and the outside albuminous, it will be seen that of the two the cheaper pot-barley is more nutritious. Prepared barley is ground or crushed to the state of flour. It cannot be made into vesiculated bread unless mixed with wheaten flour—a plan sometimes had recourse to in times of scarcity and in poor districts. Barley once formed a common food of the agricultural poor in this country.

109. Rye.—Rye will grow on a soil too poor for wheat. It is little cultivated in England, much in some Continental countries, where it is mixed with wheat-flour and made into bread. The bread is dark and has a sour taste. It may be said that only necessity or poverty leads to its habitual consumption, though its food value nearly equals that of wheat.

110. Indian Corn.—Maize, or Indian corn, is characterized by the large amount of fat that it contains. A native of tropical America, it has been successfully cultivated in the United States and Southern Europe; and in many countries where it has been introduced as

food it has partially superseded the foods common before its advent. Maize flour cannot be made into bread owing to its deficiency in gluten, but it is served in many palatable forms.

Hominy is maize deprived of its husk and coarsely ground; Indian corn-meal is a finer preparation. The green ears are served like green peas. Corn-flour, oswego, and maizena are preparations of maize, and are nearly pure starch, therefore not to be used as a principal article of diet.

111. Rice.—Rice is the most starchy of all cereal grains, containing seventy-nine per cent. There is a mere trace of fat, and it is not possible to support life upon rice alone. The Hindus mix it with beans and clarified butter, and upon their diet it is doubtful if a European would maintain health even in a hot climate. Supposing rice and wheat flour to be the same price, the rice is much the dearer of the two. Except in so far as all change of food is beneficial, rice is not to be recommended to the poor in preference to wheat. Prepared with milk and eggs its deficiencies are supplied, and it becomes a valuable food. Patna rice is best for curries. Carolina rice is dearest. Broken rice is cheapest and is an equally good food; where the price is a consideration, it should be chosen. It is best cooked and least wasted when it is steamed, rather than boiled. It must be put into a large quantity of boiling-water with salt, and boiled fast if it is meant to separate the grains; put into cold water and simmered if the grains are to be broken up.

Rice for curries must be boiled as little as possible to make the grains tender. After it is cooked pour cold water on it. Then put it in a colander and dry it before the fire or in the oven.

112. Sago.—Sago is a starch prepared from the pith of the sago-palm. It is specially easy of digestion, and therefore employed in the sick-room. It is not a nourishing food, and needs to be mixed with milk, eggs, fat.

113. Tapioca.—Tapioca is a similar preparation, rather higher priced.

114. Arrowroot.—This is a pure starch. The food value is the same as that of corn-flour, and its only claim to superiority is that it is rather easier of digestion to an invalid, and rather more delicate in flavour.

115. Foods containing Starch. — All the starchy foods should be thoroughly cooked, or they are indigestible and have a raw, unpleasant flavour. Any starch put under the microscope is seen to consist of tiny granules having an outer envelope that is not soluble in water any less hot than boiling. When starch is put into cold water it settles at the bottom unchanged. As soon as boiling-point is reached the granules swell up and burst, the result being a mucilage that cools into a sort of jelly. Any sauce that contains starch (flour, corn-flour, etc.) must be stirred until it boils, or it will settle at the bottom of the pan and become lumpy. Once it has boiled it may be left on the fire with safety, because the burst granules do not settle. For the same reason corn-flour becomes thick if boiling-water is poured on it, but if the water be any less hot than boiling it remains thin. Starch is digested by the saliva in the mouth, where it is changed to a form of sugar. The saliva does not act readily on uncooked starch granules, and the heat of the mouth does not burst them. Therefore, under-cooked starch causes indigestion, so does starch hurriedly eaten, because the saliva has had no time to digest it. An infant has in its mouth no saliva until it begins to cut its teeth. Therefore no starchy food whatever should be given until the teeth appear. In no sense of the word is starch a food for infants, even though it may be sold in a packet labelled as infants' food.

116. To Boil Flour.—Tie some wheat flour in a cloth, put it in boiling water and boil it four hours. Scrape the inside of the ball and mix it with milk or milk and water. Or put the flour on a tin in a slow oven and bake a pale fawn-colour. Either of these is good and cheap food for infants that are old enough to take any flour food.

117. Hominy Porridge.—Pour boiling water on

it and soak it all night. In the morning add one quart of water for each teacupful of hominy, and boil it half an hour. Stir in a piece of butter and a little salt, and serve hot. Any that is left over may be cut into slices and fried in a little dripping.

118. **Oatmeal Porridge.**—Put a quarter of a pound of oatmeal into a basin with a pinch of salt. Stir smoothly to it one pint of cold water. Put it on the fire, and let it boil from twenty-five to thirty minutes, adding a little more boiling water if necessary. Serve with cold milk. It may be made with milk, and turned out of a shape when cold.

BREAD-MAKING.

There are various methods of bread-making. A dough is made of flour, water, and salt; gas is then formed in the dough or forced into it.

119. **Yeast.**—There are many different forms of yeast. French or German yeast is the easiest to use, because it needs only to be weighed, and, provided it is fresh, does not vary. Brewers' yeast is sometimes dark and thick-looking, sometimes frothy and light, so that no measure can be taken as accurate for all times. Home-made yeast can also be used, and is probably the best, but requires some practice in bread-making to insure its good quality. In all cases yeast is the same. The yeast-plant consists of a round cell that, placed under suitable conditions, and surrounded by such food as it can feed on, multiplies rapidly and produces carbonic acid gas, and water, and alcohol. The gas causes the dough to be light and spongy; the fresher the yeast is, the better it grows and the more the bread rises. The water makes the dough wetter at the end of the rising before the fire; every practical bread-maker knows that bread dough at first put down to the fire seems dry; afterwards it becomes so moist that more flour has to be kneaded into it. The amount of alcohol is small and the plans intended to collect it have been unsuccessful.

It should be remembered, however, that all alcohol is produced by the fermentation of starch and sugar. The yeast plant is killed by rough usage. German yeast often makes heavy bread if it has been thrown about. It grows best when warm, and therefore bread is set to rise before the fire. But the plant is killed by too great a heat, and the dough never rises if you pour boiling water instead of tepid on the yeast, nor if you set the pan on the stove instead of before it. This will not keep long even in cool weather, but it will grow indefinitely if it is supplied with food, the yeast that grows being the same as that which it grew from. Therefore a little yeast, if it is fed with potato, sugar, or other suitable food, and kept in a proper temperature, can be used after many days.

When first the dough is put in the oven the heat makes the yeast grow vigorously. Afterwards it stops the growth. At the same time the heat expands the gas that is already made.

120. To Bake Bread.—The oven must be hot at first and the door not open for half an hour. To try if it is done, a knife may be run into the centre of the loaf, and, if it comes out dry, the loaf is ready. More experienced cooks tap on the bottom of the loaf with their hands; a baked loaf gives a hollow sound quite different to a half-baked one. Turn the hot loaves on their side, or put them on a basket or sieve, to prevent the steam from being absorbed into the crust and making it heavy.

121. To Keep Bread.—The loss of steam occasions a slight loss of weight, and therefore bakers often cover the bread with sacking, although this makes the crust damp and tough. Bread as well as cakes are kept moist in a covered crock, or tin. To crisp crust the loaf must be put in the oven for half an hour and allowed to cool before eating. This crispness soon goes off. Bread rebaked is like new, without its indigestibility.

122. Bread-making.—If bread is to be baked in a tin it may be kneaded less and made moister than if you mean to bake it on a sheet. The crust is nicer if baked

in porous earthenware (*e.g.*, a flower-pot with the bottom closed). The tins need only be floured, not greased, because bread has no fat in it. The water-yeast for bread-making should feel warm to the hand but not hot; the right temperature is 90° Fahrenheit.

Any of the following recipes will be found good. They may be used for brown or white bread, but brown meal never rises so well and always needs a little more water. All bread is better if skim milk be mixed with or substituted for water.

123. **To Increase the Weight.**—Rice and potatoes are mixed with flour in bread-making, More water is taken up and a greater weight of damper bread is made of a given amount of flour. The bread does not keep so long, and is, of course, less nourishing. It is a form of adulteration. Some persons prefer to add rice or potatoes to home-made bread. There can be no objection to this plan.

124. **To Make Yeast Bread Quickly.**—Put six pounds of flour and two teaspoonfuls of salt in a large pan. Weigh two ounces of German yeast, and mix smoothly with it, leaving no lumps, three pints of tepid water, strain this to the flour and knead the whole together. Cover with a cloth and set it to rise in a warm place, not in a draught. At the end of two hours the dough should be double its original size, and a finger pressed on it should leave no mark. Turn it on a floured board and knead in so much flour that it no longer sticks to your fingers or to the board. Then divide into four or six loaves, put it in tins, and set to rise for another twenty minutes in rather a hotter place than before. Bake one and a half to two hours.

Brewers' yeast may be used instead of German. If the yeast be light and frothy, two tablespoonfuls correspond to one ounce; if it is dark and semi-solid, a less quantity. If it is bitter, pour on some water and let it stand all night in a cool place, then use what has settled at the bottom.

125. Yeast Bread, with Potatoes.—Mash while hot one pound of boiled potatoes, add two pints of tepid water, one ounce of German yeast or two tablespoonfuls of brewers' yeast, and two handfuls of flour. Let this ferment in a warm place for six or seven hours. Then pour this sponge into a pan containing one gallon of flour and an ounce and a half of salt. Knead the whole into a dough. Let it rise another three hours, make it quickly into loaves and bake as quickly as possible.

126. Bread with Home-made Yeast.—Take four pounds of flour to one teacupful of home-made yeast. The water must be hotter than for brewers' yeast, and the bread must be set over night and left till the morning to rise. When it has risen, knead it and put in the tins two or three hours before baking. The quantity of water varies with the quality of the flour, since good flour takes up more than bad.

To make yeast, boil two ounces of hops in four quarts of water for half an hour, strain it, and leave it to cool. Add half a pound of sugar, a small handful of salt, and one pound of flour, and leave in a warm place for forty-eight hours. Then add three pounds of potatoes, well-mashed, and leave another twenty-four hours. It must then be bottled and is ready for use. It is necessary to stir it and to keep it warm while it is fermenting. Before using shake the bottle.

127. Fancy Bread.—Follow the recipe for galettes, Paragraph 141, omitting the sugar and fruit. Bake in small loaves, or twists.

128. Unfermented Bread. — To make unfermented bread no yeast or leaven is used. The bread is made to rise by means of carbonic acid gas, formed by the combination of some chemicals, generally bicarbonate of soda and tartaric or hydrochloric acid. Tartaric acid is easiest to use, but, as a result of the combination, tartrate of soda is formed—an aperient salt that has exceptionally powerful action upon some constitutions. Hydrochloric acid combines with soda to produce

chloride of sodium or common salt and makes more wholesome bread. Baking-powder bread must be mixed as quickly and handled as lightly as possible, and the dough must be moister than for yeast bread.

129. **Baking Powder.**—This is both better and cheaper if home-made. Buy bicarbonate of soda and tartaric acid by the pound at the grocer's. Mix thoroughly and pass through a sieve nine ounces of soda, seven of acid, and nine of ground rice or corn-flour. Keep dry in a tin or bottle.

For bread, to each two pounds of flour add three heaped teaspoonfuls of baking-powder, mix with cold water or milk, separate into rolls or loaves, and bake at once. The loaves should not be large.

130. **Unfermented Bread.**—Weigh five pounds of flour or meal, mix thoroughly with it one ounce of carbonate of soda, and add one quart of cold water. Mix seven and a half drachms of hydrochloric acid with one pint of water, add it to the dough, knead the whole slightly, and bake immediately in earthenware.

131. **Aerated Bread.**—This is made by forcing carbonic acid gas into a dough of flour, water, and salt. It is the purest bread to be obtained, and often agrees with invalids and infants when yeast bread cannot be taken. It cannot, of course, be made in small quantities in private houses.

132. **Buttermilk Bread.**—Let the buttermilk stand until it is quite sour, but not rancid. Put two pounds of flour into a basin. Mix together, crushing out all the lumps, one-eighth of an ounce of carbonate of soda, one teaspoonful of baking-powder, one saltspoonful of salt, and a teaspoonful of sugar. Add to the flour and make into a firm dough with the buttermilk. Knead it slightly, shape it into loaves or rolls, and bake at once. The sugar may be omitted. If the buttermilk is sweet leave out the soda and double the baking-powder. It will not be so good. Sour milk may be used also.

133. **Milk Rolls.**—Rub three or four ounces of butter into half a pound of flour, with two teaspoon

fuls of baking powder, and a little salt, and mix into a light dough with cold milk. Shape into rolls, brush them with egg or milk, sift a little flour over and bake at once ten or fifteen minutes. The quickest way to shape these is to make one long roll the thickness of your wrist, and then with a sharp knife to divide it in six or eight pieces.

CAKES.

134. **Cake Making.**—To ensure success in cake-making one or two things must be remembered.

The butter or dripping that is used must be fresh and sweet; rancid butter makes a worse cake than fresh dripping. Beef dripping is better than mutton. If the butter is strong, or if the dripping is burnt, the unpleasant flavour may, to some extent, be removed by heating it, pouring it into cold water, and leaving it to cool; or, in the case of butter, see directions under that head. In very cold weather butter may be warmed, but not melted. Where directions are given for it to be melted with boiling water or milk the result will be a peculiar short, crumbling paste, needed under certain circumstances.

Cream may be used in the place of butter, if the amount of liquid is lessened, and the cream need not be perfectly sweet. Sour milk, or buttermilk, may be used for cakes, but not rancid milk. Carbonate of soda should be used with sour milk rather than baking-powder, because baking-powder is soda and acid, and there is acid already enough in the milk.

Let currants be washed as soon as they come into the house, and kept in a jar, then they will only need rubbing in flour before using. On no account wash them just before adding them to the cake, as wet or hot fruit makes it heavy. And do not dry them in a hot oven, as this destroys their flavour. Sultanas need only to be picked from the stalks and rubbed in a little flour, not stoned. Raisins must be stoned and chopped, and this

should be done before the cake is begun, because it is a bad plan to break off in the middle.

The whites and yolks of eggs are best whipped separately in many cases. Eggs are not necessary ingredients of baking-powder cakes, which are quite as light without them; they are added only to increase the richness.

Yeast-cake may stand before it is baked, but cakes made light with baking-powder, soda, or beaten eggs must be baked at once and in a hot oven.

Grease the tins with dripping or butter, according to which you have used for the cake. Suet is less likely to stick than either. If the cake is very rich it is more apt to stick to the tin and to burn; therefore line the bottom and sides with a doubled piece of paper cut to the size and well buttered.

Take the cake from the tins as soon as they are cooked, and lay them on a sieve to cool. If they are to be kept, place them as soon as they are cold in a tin, but not together with biscuits or anything that is meant to be crisp, or each will spoil the other.

A stale cake may be freshened by covering it with a tin and warming it through in the oven. Stale cake-crumbs can be used in the place of bread-crumbs for sweet puddings.

135. **Buttermilk Cakes.**—Make as directed for buttermilk bread, but rub into the flour half a pound of butter or dripping, currants, raisins, candied peel, sugar, etc., at discretion. No eggs are needed, nor so much butter as for an ordinary baking-powder cake. Bake at once.

136. **Carnival Cakes or Merveilles.**—Mix two eggs with a teacupful of milk, add gradually to half a pound of flour and beat thoroughly. Let it stand for two or three hours, then knead in enough flour to enable you to roll it out into a *very* thin paste.

Cut it in rounds the size of a plate, and in each round cut four parallel lines to within an inch of the edge. Take each cake up by these bars, one bar in each

hand, and throw it into hot fat. Fry a pale yellow, pile them up on a dish and strew sugar on each. To be eaten cold. They do not keep well.

137. **Corn Cake.**—Take of finely-ground Indian corn-meal and of wheat-flour half a pound each, rub in three ounces of butter, add one and a half teaspoonful of baking-powder, and sufficient cold milk to mix the whole. Bake immediately in a flat tin and serve hot. It should be about two inches thick, and, of course, rises considerably.

138. **Dough Cake.**—Take one pound of bread-dough made by any of the foregoing recipes for yeast bread. Dough can also be bought at a baker's. Knead into it a quarter of a pound of sugar, a quarter of a pound of fruit, two or three ounces of butter, one ounce of candied peel and one egg. Mix thoroughly, grease a tin and bake in a good oven. This will be a very plain cake. The quantities of sugar, etc., can be doubled.

139. **Dough Nuts.**—Take one teacupful of sour milk, or buttermilk, one egg, three quarters of a pound of flour, quarter of a pound of white sugar, half a teaspoonful of ground cinnamon, half a teaspoonful of carbonate of soda, two ounces of butter, the rind and juice of a lemon. Mix all together. Roll out to half an inch thick and cut into short strips with a wheel. Fry in a saucepan of fat a pale brown, and sift sugar over before serving. Should be eaten the day they are made, but they will keep in a tin for some time. The fat must not be very hot, or they will be too brown before they are cooked.

140. **American Dough Nuts.**—Take a quarter of a pound of flour, one ounce of butter, half a teaspoonful of baking-powder, one ounce of sugar, a few drops of essence of lemon, or lemon-juice if approved, one egg, and half a cupful of warm milk. Let it stand a couple of hours. Then drop it by tablespoonfuls into hot fat and fry a light brown.

141. **Galettes.**—Melt three ounces of butter in a teacupful of milk, and mix it with half a pound of flour.

Warm another teacupful of milk, stir it smoothly to half an ounce of German yeast, and pour this into another half a pound of flour kneading the whole to a dough. Add the contents of the two basins together, break in one by one three or four eggs, and beat the whole with the hand for ten or fifteen minutes till it is light and full of bubbles. Then cover it with a cloth and set it to rise in a warm place for two hours. Put some flour on a board, turn the dough out and knead it into a light, firm dough. Knead in with the flour two ounces of white sugar, two ounces of sultanas, and two ounces of citron-peel. Put it into tins, brush the top with milk, ornament with slices of citron, sift sugar over, and set it to rise for another twenty minutes in a warm place. Then bake in a good oven. If the fruit, peel, and sugar be left out, this recipe is a good one for breakfast rolls.

142. **Gingerbread.**—Mix in a basin half a pound of flour, half a teaspoonful of baking-powder, quarter of a teaspoonful of ginger, and two ounces of brown sugar. Melt in a saucepan quarter of a pound of golden syrup and two ounces of butter, lard, or fresh beef dripping. Pour this boiling on the dry ingredients, stir with a spoon, then roll to half an inch thick and bake at once in a flat tin. Cut into squares while hot.

143. **Thin Gingerbread.** — Take one pound of flour, six ounces of moist sugar, half a pound of treacle, quarter of a pound of butter, three quarters of an ounce of ginger, one ounce of candied peel chopped very fine, a little grated nutmeg, and the rind of a lemon.

Mix as above, knead well, roll it out while hot, cut it into round cakes, put a thin slice of peel on the top of each and bake in a moderate oven. Gingerbread is liable to burn, and needs care in baking.

144. **Oatmeal Biscuits.**—Take ten ounces of fine oatmeal, half a teaspoonful of baking-powder, a pinch of salt, one dessert-spoonful of sugar, if it is wished to make them sweet. Boil two ounces of butter and half a gill of milk, and pour it on the dry ingredients. Knead quickly, roll it very thin, cut it into cakes with a round

cutter, and bake immediately a very light brown in a moderate oven. Coarse oatmeal is preferred by some, or a little flour may be substituted for part of the meal.

145. **Scotch Oat Cake.**—Take two handfuls of coarse meal and a pinch of salt and rub into it a very tiny piece of bacon-fat or dripping. Make into a stiff paste with boiling water. Knead in oatmeal until it is firm enough to make into a very thin round cake with the knuckles of the right hand. The thinner it is the better. Cut it in quarters and bake slowly until hard, but not coloured, on a girdle or in an oven. Put the girdle on the fire. Sprinkle some flour on it, and when the flour browns rapidly it is hot enough to use. Raise it a little, grease it slightly and put on the cakes, turning them once with a knife. To make them white, rub repeatedly with fine meal and dry them each time in an oven or before the fire, standing them on end.

146. **Plum Cake.**—Take one pound of flour, six ounces of butter, quarter of a pound of sultanas, or of raisins stoned and chopped, quarter of a pound of currants, half a pound of sugar, quarter of a pound of candied peel cut fine, a little spice, three eggs, quarter of a pint of milk, and two teaspoonfuls of baking-powder. Mix the dry ingredients, add the milk and yolks of the eggs. Then whip the whites to a stiff froth, stir them lightly in and bake at once about one and a half hour. The tin should be lined with buttered paper and half-filled.

A teaspoonful of carraway seeds can replace the currants and raisins if preferred. Carraway seed are also sold *ground*.

147. **Rice Cake.**—Take four eggs, their weight in sugar, half their weight in flour, half in ground rice, and half in butter. Melt the butter over the fire and add last of all. Mix as for sponge cake in the following recipe. The butter may be omitted. The eggs may be beaten slightly and stirred into the dry ingredients with a teaspoonful of baking-powder, but it is not nearly so good.

148. **Scotch Shortbread.**—Take three ounces of

flour, one of ground rice, one ounce of castor sugar, and two ounces of butter. Mix all together with the hands, using no moisture. A piece more butter may be necessary in winter. Shape into square or oval cakes three quarters of an inch thick, mark the sides with the back of a knife, ornament the top with slices of candied peel and sweetmeats, and bake.

149. **Sponge Cake.**—Never wash the tins or the cakes will stick to them. Put some beef-suet in the tins, let it melt, and turn the tin about so that it is thoroughly greased in all parts, turn out the suet and sift all over some fine sugar or some flour. Into a basin put five eggs and a quarter of a pound of castor sugar, set it over a saucepan of hot water and whisk until it becomes a thick white froth. It will take from fifteen to twenty minutes. Dry three ounces of flour and stir it in very lightly. Half fill the tins and bake at once in a moderate oven twenty to thirty minutes, or according to size.

PASTRY.

150. **To make Pastry.**—Much depends upon practice in pastry-making, for beginners generally use too much strength to roll it out. But the rules for making light pastry stand good for all. Roll as much air into the paste as possible, and, of course, squeeze as little out as the process of rolling may permit. Make pastry in a cool place so that the air may be cold, and handle it as little as possible, because the heat of the hand warms the air and turns the butter to oil.

Why need there be air? Why should it be cold? Cold air takes up a very little space, the same air heated will occupy much space. The air in pastry is always cold in comparison with the air in the oven; the object is to make the difference between the two as great as possible. The cold air being suddenly heated, expands, and tries to escape, in so doing it expands the pastry. When the oven is too cool, pastry is heavy, however well-made it may be.

Pastry without baking-powder will keep unbaked for some hours, with baking-powder it must be baked at once.

It is needless to add that the butter must not be melted. In cold weather rub in the butter with your hands; in the summer turn the flour on a board and chop in the butter just as you would chop suet. Put not more than half a teaspoonful of baking-powder to a pound of flour.

Use cold water, the coldest you can get, and do not make the paste too wet, as this is a common fault. Stir it in on the board with a knife, or in a basin with the fingers, not a spoon.

In rolling pastry lift the rolling-pin often instead of rolling continuously with the palms of the hands outstretched. Roll lightly, do not bang the pastry, nor turn it over. The trimmings need be no less light than the first piece, nor will they be if you lay each one flat on the other and roll them, instead of squeezing them into a round ball.

In making a tart wet the edge of the dish, that the paste may not stick, lay a strip of pastry rather thick round the edge, wet this, that the two layers of pastry may adhere, and lay over all a very thin piece of pastry. The steam from the fruit always makes the top crust less light than the edge. To glaze pastry, brush it over with egg; the yolk makes it a better colour. For a sweet tart, brush it with water and sift a little white sugar over. Glaze only the top, not the edges, as that would prevent its rising.

Make a hole in the top of a meat-pie, as the gases can then escape and the pie is more digestible. The steam in cooking is likely to lift the crust and spoil its appearance if there is no escape.

A meat pie is ornamented with pastry cut in various devices; a fruit tart is usually not ornamented, except by marking with a knife or cutter. Tartlets are best not baked with the jam in them. Round pieces of bread-crust or of flour and water should be baked in them,

and removed while hot. It makes pastry rise to place little pieces of butter on it just before baking. Lemon juice is added to take off the richness; it also tends to make it light.

151. **Dripping Pastry** (1).—Into one pound of flour put three to six ounces of clarified fat or dripping from roast meat, with a pinch of salt and half a teaspoonful of baking-powder. Roll to half an inch thick for meat-pies, rather thinner for tarts. Bake at once.

152. **Dripping Pastry** (2).—Take a piece of baking-powder or buttermilk bread made by any of the foregoing recipes. Roll it out and fold it over two or three ounces of dripping. Roll it several times as for flaky pastry, and bake it at once. A very good recipe for very plain pastry.

153. **Flaky Pastry.**—Pastry is made flaky by rolling in butter or lard after it has been wetted. The butter may be put in all in one piece and the paste folded over, or it may be placed in small pieces all over the pastry—either plan is equally good. The paste must be folded exactly in three, not rolled like a pudding. It must be rolled evenly, or it will rise unevenly. Having folded the paste over the butter, turn it round and roll it once, then fold, turn, and roll it again. Unless special directions are given it must be folded and rolled until no patches of butter are visible, about four times for ordinary pastry. In hot weather and for very rich pastry it is better to wait between the rollings. If you have ice to keep the paste cool put it in a basin, set that in a pan of salt and water in a draught. Salt and water is always colder than water alone. Roll always backwards and forwards, not from side to side. A marble rolling-pin is cold and therefore good; so is a glass rolling-pin, or what is the same thing, a straight wine-bottle. Either of these recipes will serve. The secret lies in the making, not in the precise amount of butter.

Rub four ounces of lard or butter into three-quarters of a pound of flour, mix it into a paste with cold water

and a few drops of lemon. Roll in two ounces of butter after it is mixed.

Or rub four ounces of butter into six ounces of flour, mix it into a paste with cold water and the yolk of an egg. Roll it four or five times as above, but add no more butter.

154. **Genoese Pastry.**—To be eaten cold, with fruit or preserves. Take six eggs, four ounces of butter, four ounces of flour, six ounces of sugar, essence of lemon. Mix as directed for sponge-cake, adding the butter melted last of all. Bake in copper pan, if possible, with double paper under as it is apt to burn, and the oven must be very hot.

155. **Potato Pastry.**—Cold or hot potatoes, salt, a little dripping, and flour to make a paste firm enough to roll. Knead it well. Use no water nor milk. It is best eaten hot as an economical crust for meat pies and turnovers.

156. **Puff Paste.**—Mix four ounces of the finest white flour into a paste with cold water and a few drops of lemon-juice. Let the paste be of the same consistency as the butter, which must be well washed to free it from salt and squeezed dry in a cloth. Roll the paste to a quarter of an inch thick, put the butter in the middle and roll twice as directed for flaky pastry. Then wait not less than a quarter of an hour, roll twice more, and wait again. When you have rolled in all seven or eight times it will be ready to use. Cut it with a round cutter dipped in hot water. If for patties mark the inside with a smaller cutter, but do not cut quite through. Cut also a separate piece of a suitable size for the top. Glaze with yolk of egg. The oven can hardly be too hot.

Vol-au-vent cases are made in the same way but larger. Remove the inside with a knife as soon as it is baked.

157. **Raised Pie-Crust.**—If a tin is to be used take one pound of flour, salt, five ounces of lard, and a little milk. Pour the lard and milk boiling on the flour, knead, and line the tin about half an inch thick, taking

care to leave no holes or the gravy will escape. Glaze the top with egg and ornament with cut paste. The tin must be a proper pie-tin, as a cake-tin cannot serve. This crust is too brittle to shape without a tin, but it is crisper than the following for standing-pies.

One pound of flour, salt, quarter of a pound of lard, quarter of a pint of water. Mix as before, and shape on your hands as quickly as possible before it cools.

158. **Short Crust.**—Take one pound of flour, one egg, one dessertspoonful of sugar, eight ounces of butter. Less will do. Rub the butter into the flour, and mix into a paste with the egg and cold water. Roll once only.

159. **Suet Crust.**—Chop the suet very fine, mixing it with a little flour if it sticks to the knife. Use not more than half a pound to one pound of flour. Add half a teaspoonful of baking-powder. Mix into a light paste, not too wet, with cold water. It may be used for boiled or baked puddings and pies.

CHAPTER VI.

VEGETABLES.

160. **Vegetables.**—Vegetables include all foods not animal. But as the word is generally employed to denote such vegetable foods as are commonly served at dinner, we use the word here in the restricted sense.

Vegetables in this country are apt to be considered rather as luxuries than as necessaries, the common opinion being that meat is the one thing needful and that all other foods might as well be absent. It is true that a man can live and preserve health, under some circumstances, upon a diet of meat alone; it is more obviously true that men live in the rudest health with a diet consisting solely of vegetables.

Again popular prejudice classes all vegetable foods together, refusing to discriminate between a pound of boiled cabbage and a pound of haricot beans—both excellent foods in their way, but certainly not equivalent. In short, English people eat few vegetables, and what they do eat they waste by their method of cookery.

All fresh vegetables contain far more water than anything else. In one hundred pounds of cabbage, for instance, ninety one pounds are water, only the remaining nine pounds being solid nourishment. Suppose that any vegetable is burnt there remains behind a large quantity of ash. That ash is what is meant by the "incombustible matter," or the "mineral salts." Of the nine pounds of solid, about two pounds will be ash. Of the rest some is albumen, some sugar and starch (or

near akin to starch), and some cellulose, which is not digestible. The food value of green vegetables lies chiefly in the ash, not because albumen and starch are valueless foods, but because they are supplied elsewhere, whilst potash, soda, and other mineral salts are not to be found in sufficient quantities in any common foods except fresh vegetables and fruits. Vegetables usually contain little or no fat : therefore they are mixed with butter, bacon, or dripping.

161. To Cook Vegetables.—The usual method of cooking vegetables is to throw them into a large quantity of boiling-water, and then, after some time, to throw away the water and to eat the vegetables. When anything salt is thrown into water, one expects that the salt will be drawn out and dissolved in the water. This is precisely what happens in the case of vegetables. Not only is much of the salts thrown away, but also so much of the remaining solids as is soluble in water. The insoluble solids are often the indigestible solids also. Whenever, therefore, it is possible, the water in which vegetables have been boiled should be used for soup or gravy.

One is often met by the assertion that water in which vegetables have been boiled is poisonous. What then becomes of the poison in soups and stock that are habitually flavoured by boiling vegetables in them? Or how can it be explained that in all countries save England vegetable soups are eaten every day without ill effect? With some persons of delicate digestion potatoes and onions are less likely to disagree if they are parboiled or scalded before using for soup or stew, but this idiosyncrasy cannot be taken as a guide for the world at large, nor for those numbers of people who need the utmost supply of nourishment that can be obtained from a too scanty diet.

As a rule, all fresh vegetables must be put into boiling water and boiled fast all the time. Simmered they are both tough and a bad colour. That is the reason why it is not easy to cook a tiny piece of meat with carrots and turnips and to keep both tender. The carrots should be boiled half an hour alone fast, then the meat put in the

same pot and simmered to the end. Boil vegetables, by preference, in soft water. A piece of soda is added to the water to keep it soft, and to keep the vegetables green. Bicarbonate of soda, or common washing-soda, can be used, but only the bicarbonate is admissible when the water is to be used as in peasoup. The lid must be left off the saucepan while the vegetables are cooking, and there must be a large quantity of water if they are to remain green.

162. Chemical Additions to Vegetables.—To put copper or any other chemical into the water is both injurious and unnecessary. If the above rules are obeyed, the vegetables will be greener after cooking than before.

163. To Keep Vegetables.—It is essential that *all* vegetables be eaten as fresh as possible. A sort of fermentation goes on when they are stacked for days, as are the cabbages that supply the London market, and they become less digestible in consequence. Vegetables should not be dry or cut twenty-four hours before cooking. They keep best if the cut ends are put in water, and the water frequently changed.

164. Artichokes.—There are two kinds of artichokes: the green artichoke, a sort of thistle, of which the flower-head is used and also sometimes the blanched leaves ; and the Jerusalem artichoke, said to be a corruption of *girasole* —the Italian word for sunflower, to which tribe of plants this artichoke belongs. The two have little in common but the name. Jerusalem artichokes somewhat resemble potatoes, but because they contain no starch they do not swell up and become floury. They keep well and are not attacked by frost. Peel and put into boiling water and salt, and boil until tender, about twenty minutes. Drain the water off and send to table with white sauce poured over. Cold artichokes may be rolled in egg and breadcrumb, or milk and flour, and fried in boiling fat. They should be cut so that they stand upright, and are all the same size, and a white sauce poured round. Green artichokes must be carefully washed free from grit and

put into boiling water with soda to cook twenty to twenty-five minutes. Serve melted butter in a tureen. Cardoons, too little used in this country, should be cooked in the same way.

165. **Asparagus.**—Choose heads that are all of the same size. Scrape the white ends and tie them in bundles with the heads all one way. Put them into boiling water, with salt and a very small piece of soda, and do not allow them to boil too fast or the heads break. In about fifteen minutes take them up, untie the string, and lay them on a slice of toast dipped in the water or on a strainer.

A better way to cook them is to take a large deep saucepan half full of boiling water and to set the asparagus in upright, so that the water does not reach to the green part. Steaming them in this manner the flavour is better preserved and the green is not overcooked before the white is done. Serve in a tureen melted butter, or some fresh butter melted. Some persons prefer salad oil. The large foreign asparagus needs long and slow cooking or it will be tough. For a garnish for cutlets, etc., the green part is cut into short lengths and the white is not used.

166. **French Beans.**—Cut the beans into thin shreds, removing the ends; throw into boiling water and soda, and boil ten to twenty minutes, according to age. Serve on a strainer without sauce. They may also be boiled whole like asparagus, when the flavour is decidedly better. If too old to serve plain boiled, they may be cut into squares and put into soups and stews.

167. **Haricot Beans.**—These are the dried seed of the French or kidney bean, one of the pulses, and, like the rest of this tribe, a very nourishing food, capable of replacing meat. It is, perhaps, for this reason used less in this country than on the Continent, where the frequent days of fasting make some meat substitute a necessity. They vary much in size but are all of the same kind. Soak them in cold water all night and remove the black seeds. Put them into cold water with

salt enough to cover them, and let them simmer two hours or more until they are tender. Just so much water should be used as will leave the beans dry when cooked. Serve hot with melted butter, or brown gravy, or stir in a piece of butter and a little chopped parsley. Instead of boiling they may be put in a jar with pepper, salt, and water enough to cover them, and, if liked, a few slices of fat bacon. Bake three hours in a moderate oven.

168. **Potted Beans.**—Take half a pint of the vegetable cooked as above. Pound them in a mortar, add two ounces of strong grated cheese, one ounce of bread-crumbs, one ounce of butter, salt, cayenne, and nutmeg to taste. Press it into jars, pour a little clarified butter over, and serve as potted meat. It does not keep long.

169. **Cabbages.**—Soak them for several hours in water with salt or vinegar. Throw them into plenty of boiling water with salt and soda and boil fast without the lid until tender. Drain them free from water, dish them on a strainer, cut them across, and serve at once as they become sodden by keeping. If the cabbage is strong, change the water after it has boiled ten minutes. Always throw away cabbage water at once, because it has a disagreeable smell.

Red cabbage is generally pickled, but may be boiled as above, without soda, and served with melted butter.

170. **Stuffed Cabbage.**—Boil a large round cabbage just too little to send to table. Remove the middle but be careful not to break the outside. Mince two tablespoonfuls of cold meat, two of lean ham or bacon, one of suet, add the grated rind of a lemon, one egg, or a little milk, a little nutmeg, pepper, salt, and a little sauce or catsup. Fill the inside of the cabbage, tie it round with string, bake in a moderate oven twenty minutes, and serve with brown gravy poured round. The cabbage must be basted with butter or dripping, and must not be dried or browned.

171. **Cauliflower, or Brocoli, with White Sauce.**—Wash it thoroughly and soak in salt and

water. Cut the stalk across that it may cook quicker. Put into boiling water with the flower downwards that no scum may settle on it. Do not boil fast or the flower will break. Serve with white sauce poured over.

172. **Cauliflower au Gratin.**—Boil as above, and cut the stalk so that it stands upright on the dish. Press it into a round shape with a cloth. Melt in a stewpan one ounce of butter, add one ounce of flour, one gill of milk and two ounces of grated Parmesan cheese, salt, and cayenne to taste. Pour this over the cauliflower. It should be thick enough to adhere, not to run into the dish. Sprinkle another two ounces of cheese over, and brown in a very hot oven or before the fire. Serve at once, if possible, on the same dish. Cold cauliflower can be used, and any dry grated cheese.

173. **Carrots.**—This vegetable should be scraped with a knife from the head downwards and not peeled, because the best part of a carrot is the dark outside ring. The inside is neither so good a colour, nor so digestible, nor so nourishing, nor so well flavoured. Scrape them, therefore, as thinly as possible. If they are old, cut them lengthways in quarters; if small, boil them whole. Put them in boiling water or broth, not cold, and boil fast, not simmer. Simmered vegetables are always tough. The time depends on the age of the carrots. For garnish they should be cut into fancy shapes and boiled separately because they discolour all vegetables that they are cooked with. It is best only to use the outside; the inside will do to flavour soups and stews. They are also boiled soft and pressed through a fine sieve as garnish for boiled fowl, etc.

174. **Mashed Carrots.**—Boil as above in broth instead of stock. Rub them through a sieve, add salt, pepper, and a piece of butter. Press them into a cup or mould, turn them out, and serve hot. Alternate moulds of carrot, turnip, and spinach make a pretty dish, or a good garnish for boiled mutton.

175. **Dressed Carrots.**—Boil young carrots, as above, unpeeled. Rub off the skins in a cloth. Return

them to the saucepan with a piece of fresh butter and shake them about until the butter is melted. Add a little finely chopped parsley and salt. Serve hot.

176. **Celery.**—This is often eaten raw, when it must be young and fresh. For flavouring, celery-seed may be substituted, and should be tied in muslin. Celery salt may be bought at the chemist's. The young leaves will also serve, and any discoloured pieces that are useful for no other purpose. To boil it is put into boiling water and salt, and boiled until tender. It must then be drained and served with a white or brown sauce poured over. It may be boiled in broth instead of water, which should be used for making the sauce.

177. **Dandelion.**—A very good salad may be made from dandelion if the leaves are young, or it may be cooked in a little water and served in the same way as spinach. Dandelion plants may be grown under a pot or tied up and blanched; they will then be less bitter.

178. **Lentils.**—There are several kinds of lentils sold, all having about the same food-value. They belong to the pulse tribe, and are said to be the most nourishing of all foods. Nevertheless, until within the last few years, lentils were almost unknown as an article of human food n England. Split lentils are the best to buy, since the skins of all pulse are very indigestible. Ervalenta and revalenta arabica, sold as food for invalids, are preparations of lentil flour, generally mixed with wheat or barley to make it more palatable. They can hardly be suitable for the majority of invalids, because all pulse is difficult of digestion even to those in strong health. Lentils are often served as soup, but they can also be served as a purée to garnish meat, or made into a pudding, as directed for peas. Lentil flour is sold, but is no better than split lentils, and dearer.

179. **Vegetable Marrows.**—Put the marrows into boiling water and boil till tender. Quarter them, take out the seeds, and send to table with melted butter. They may also be stuffed as directed for cabbage. If preferred, the stuffing may be made as for veal, without meat.

180. **Mushrooms.** — There is but one kind of fungus commonly eaten in England, though many others are equally palatable and wholesome and form an important article of diet in other countries. Large mushrooms may be broiled or baked, small ones are better stewed. A very good plan is to butter a baking tin, put in the mushrooms stalk upwards, with a piece of butter on each, cover them closely down, and bake them for twenty minutes. They may be stewed in brown gravy or in cream. Mushroom powder and preserved mushrooms are sold for flavouring. The former loses flavour by keeping and varies in quality.

181. **Onions.**—Only the large Spanish onions are mild enough to be used otherwise than as a flavouring. They are among the most useful of vegetables, not only on account of their flavour, but because they contain valuable nourishment, cooked or uncooked they form a staple food of many populations. They are both disagreeable and indigestible to some persons, but can be made more palatable and easier of digestion by soaking in boiling water for half an hour before using. This plan, of course, is a wasteful one where it can be avoided. The brown skin is used for colouring soups and sauces, and should not be thrown away. It has not much flavour. The white part is often fried in butter or dripping to colour sauces. It must be cut in rings, dry, and fried a very dark brown, not burnt. Cooked so, it loses much of its flavour. Onions must not be cut with a knife afterwards to be used for other things, as the flavour is hard to remove even by washing. After using onions wash your hands with carbolic soap, or put a little Condy's fluid in the water.

182. **Giant Puff Ball.**—Must be gathered when white throughout. If it is brown inside it is not to be eaten. Cut it in slices half an inch thick, and fry it in dripping or butter. Serve hot. It is better if dipped in egg and bread-crumb and fried in a saucepan of fat. Those not acquainted with this recipe should make trial of it.

183. **Parsley and Herbs.**—Parsley should be freshly gathered, or, if it must be kept, the stalks should be put in a vase of water not the whole plant immersed, as it then soon decays. The stalks have a bitter flavour and should only be used for garnish. Before chopping parsley, squeeze it in a cloth, and chop it with a sharp kitchen knife, holding the point down on the board and working the blade as on a pivot. Chop it very fine.

To fry, squeeze it in a cloth to dry it, put it in a basket and dip it in very hot fat for one minute, or less. Cooked too long it turns brown, and it should be green; it can always be dipped in again if it is not quite crisp. Take the fat off the fire or turn down the gas because parsley contains so much water that it is sure to bubble violently and may boil into the fire, which is dangerous. Sweet herbs should always be kept at hand for flavouring. They may be fresh or dried, pounded, and stored in bottles for winter use. A bunch should be tied with string, with a bayleaf and a sprig of parsley, and used for stews and soups. It can then be removed before serving, for the stalks look very unsightly in the dish.

184. **Peas.**—This is another vegetable of the pulse tribe, rather less nourishing than lentils, but much more common. Green peas to keep their colour must be put into boiling water, but not boiled fast or with soda because the skins crack. A sprig of sage must be boiled with them and a piece of fresh butter stirred in just before serving. Whole dry peas may soaked in water all night and then slowly stewed until tender, to be served as a substitute for green peas.

Pea flour is sold, and several preparations for making soup with but a few minutes' boiling. Split peas are the best to buy for general use.

185. **Pease Pudding.**—Soak one pint of split peas in water all night. Tie them in a cloth, put them on to boil with cold water enough to cover them and a teaspoonful of salt. With a little soda they will sooner cook. As soon as they are soft drain the water away, mash them with a spoon, add one ounce of butter or

dripping, pepper and salt, and, if desired, one egg to bind the whole, but it is not necessary. Tie them tightly in the cloth again, put them in boiling water for three-quarters of an hour, turn it out and serve with melted butter round. Generally eaten with boiled salt pork.

186. **Potatoes.**—The potato may be considered as next in importance to the corn-plants. Like them it contains much starch; unlike them it is very watery; in every pound of potatoes is about three quarters of a pound of water. A great weight is necessary to support life; the Irish peasant is said to consume ten and a half pounds a day, and even with this amount he would fare badly without the addition of milk or buttermilk.

Potatoes, like all fresh vegetables, contain potash and other salts, and are very valuable as an anti-scorbutic. It is well-known that sailors at sea do not suffer from scurvy so long as the potatoes last. And it has been asserted that the health of the people of this country would materially suffer were they deprived of even a part of their supply, inasmuch as the great majority of Englishmen are in the habit of using no other vegetable.

Certainly in the present state of potato cultivation, many others might, with advantage, be occasionally substituted for it, even though no other can be served in such a variety of ways, or can be used so long without weariness.

If a very thin slice be cut through the middle of a potato and be held up to the light, it is easy to see the construction. The centre is semi-transparent and watery, divided into large cells, while the outside near the skin is opaque. When a potato is peeled, therefore, not only is a considerable proportion cut off and thrown away, but also the part that is wasted is the least watery and most nourishing. Further, the skin of a potato is composed of a substance similar to cork and impervious to water. By removing that one takes the best possible precautions that the water shall get into the potato and that all that is soluble shall remain in the water and be thrown away. It is calculated that if they are cooked in their skins only

one potato in sixteen is wasted ; if without them one in seven or eight. If they are peeled it must be as thinly as possible. Steaming wastes less than boiling, and cooks them better, especially if they are such as easily break.

187. **New Potatoes, to Cook.**—Put them into boiling water and boil fast from twenty to thirty minutes. Put old potatoes into cold water and do not boil them fast fifteen to twenty-five minutes. Try if they are done with a skewer or fork. Drain the water off, take off the lid and set the saucepan on a slow fire to evaporate the steam. Almost all potatoes can be made floury by judicious treatment. Some very waxy old potatoes should be put in boiling water like new ones. Some will be good by putting into cold water, bringing it to the boil, and then beginning again with cold water. Some are better when cooked in only just enough. water to prevent burning—steamed in point of fact, Allow a tablespoonful of salt to a gallon of water. Salt and water may be hotter than boiling water, and potato starch-granules are not well cooked unless they are heated above 212°. Fahrenheit. Choose potatoes all of one size, put them in a saucepan close together, and put in just enough water to cover them. Small ones do well to mash or for soup. Large ones must be most economical if all are the same price, and if bought by weight, because there is less skin. The skin is absolutely indigestible and should not be eaten. If cooked in the skin, they should *not* be allowed to crack.

188. **Potato Croquettes.**—Mash two pounds of boiled potatoes while hot, add two ounces of butter, lemon-juice, cayenne, and salt, one egg, and a little milk. Flour your hands, shape the mixture in balls or pyramids, roll them in egg and breadcrumb, or milk and flour, and fry in a saucepan. Garnish with fried parsley, stick a stalk of parsley in each, and serve hot on a paper or napkin. The egg may be left out. Cold potatoes may be used but are not so good.

189. **To Fry Potatoes.**—Pare them round and round like peeling an apple, or cut them in slices, or

oblong pieces, as fancy may direct; and throw them in cold water. Dry them in a cloth, throw them in hot fat, take them out as soon as they are coloured, drain them on paper and sprinkle with salt. They are sometimes parboiled before frying and are then not so crisp. Fry only a few at a time as they are watery and lower the temperature of the fat. Cold potatoes are fried in a frying-pan. Small new potatoes in a saucepan.

190. **Mashed Potatoes.** — Rub the potatoes through a sieve or colander; they will be smoother than if mashed with a spoon. They are better mashed while hot. Boil a little milk in a saucepan with a piece of butter or dripping, and pour it to the potatoes. Serve in a mound, which may be browned in the oven or not. If it is to be shaped, dip a wooden spoon in boiling water, and it will not stick.

191. **Potato Soufflee.**—Bake half a pound of floury potatoes, and mash them through a sieve. Add one ounce of butter, lemon-juice, cayenne, the yolks of two eggs, which must be well-stirred, and the whites of three eggs whipped to a froth and stirred in very lightly. Bake at once and serve immediately as they fall as soon as out of the oven. Time, five minutes if in small cases, fifteen or twenty if all baked at once. The oven must be very hot. See directions for soufflée-making, Index.

194. **Pumpkins.**—The pumpkin may be used in a pie with sugar and with or without apples, spice, currants or raisins. To serve as a vegetable it should be cut in pieces and cooked until tender in its own juice, and then all the water squeezed out in a cloth. Return it to the saucepan with a piece of butter, a little milk or cream, pepper, and salt, and a very little nutmeg.

193. **Salads.**—The lettuces should be gathered fresh. Keep them as you would a bouquet of flowers with the stalks in water. Wash them carefully, cut them with a silver knife, dry them on a cloth. The beetroot must be baked or boiled and sliced when cold. Care should be taken not to pierce the skin before cooking, as

it loses colour. Potatoes are boiled and sliced, tomatoes are used raw, other vegetables usually raw also. Salad or mayonnaise sauce, or a simple dressing of oil and vinegar, may be used.

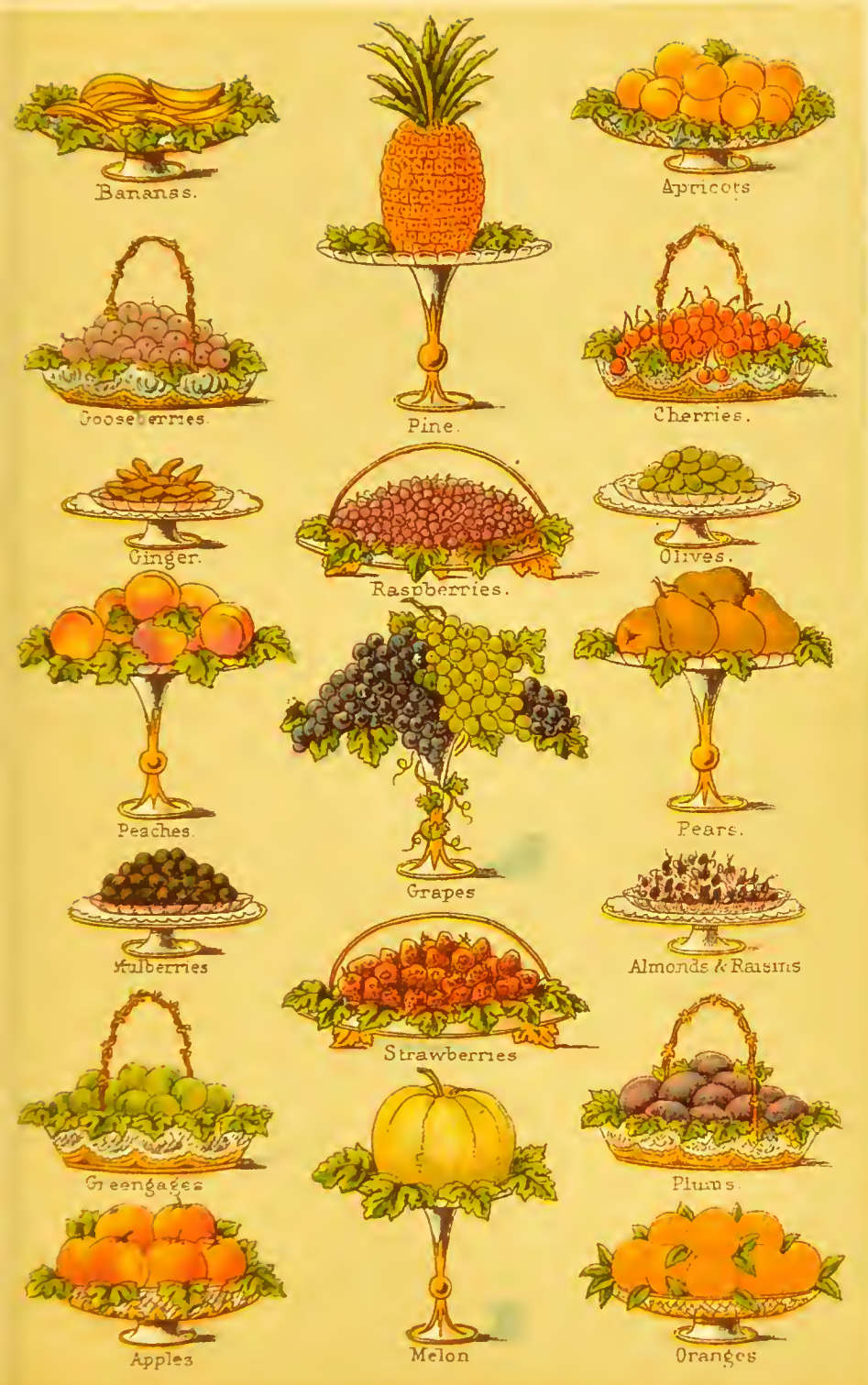
194. **Spinach.**—Pick the leaves from the stalks and wash them in several waters. Put them in a saucepan without water and cook until tender. Then drain the juice away, chop them or rub them through a sieve, return them to a saucepan with one ounce of butter, two tablespoonfuls of cream, pepper, and salt. Serve in a mound and garnish with hard-boiled or poached egg, or with sippets of fried bread.

195. **Tomatoes.**—This favourite vegetable is often sliced and eaten raw as a salad, or used as a garnish for cutlets, etc. The simplest way of cooking tomatoes is to put them whole on a tin in the oven with a small piece of butter or dripping. They can afterwards be used as a garnish for roast meat. To remove the core and seeds they must be boiled or baked and rubbed through a sieve.

196. **Turnips.**—Turnips should be peeled thickly so as to remove the outer rind which is woody and unfit to eat. The rind can be used for flavouring soups and broth. Turnips are cooked in boiling water. They are generally mashed with butter and milk if served as a separate vegetable. They can also be fried like artichokes.

197. **Truffles.**—The truffle is an expensive luxury in this country and much esteemed. The preserved truffles sold in bottles are very inferior to the freshly-gathered vegetables. They should be used fresh, not kept to dry. Sometimes they are wrapped in buttered paper and baked in a moderate oven, and served hot in a napkin; more often they are added to entrées, forcemeats, etc., to improve their flavour.

198. **Vegetable Pasties.**—A very economical way of cooking such vegetables as are suitable. Potatoes, young leeks or onions, turnips, sweet herbs, and parsley, with seasonings of pepper and salt, and a piece of dripping or fat meat may be used. The vegetables to be cut


Bananas.
Pine.
Apricots
Gooseberries.
Cherries.
Ginger.
Raspberries.
Olives.
Peaches.
Pears.
Grapes
Mulberries
Almonds & Raisins
Strawberries
Greengages
Plums.
Apples
Melon
Oranges

DESSERT

small, uncooked, and enclosed in a round of dripping or suet pastry. To be baked in a moderate oven according to size and served hot.

199. **Vegetable Pie.**—Boil one or two eggs hard. Boil some maccaroni, make a little veal-stuffing, slice one or two onions and tomatoes, and grate a little dry cheese. Put it in layers in a pie-dish, with pepper and salt to taste, and a cupful of stock. Cover the whole with flaky or short crust, and bake in a good oven about one hour. A little cold meat of any kind may be minced and added to the other ingredients.

CHAPTER VII.

SOUPS.

200. **Soups.**—Soups can be made of anything that is fit for food—vegetables, meat, bones, or farinaceous substances. They are not a highly concentrated form of nourishment, containing, as they do, far more water than anything else.

201. **Vegetable Soups.**—These have in them the whole of the vegetable except a small amount of woody fibre which is not digestible even if eaten, and they have lost none of the soluble parts of the vegetable so generally wasted by ordinary methods of cooking.

202. **Meat Soups.**—If clear these soups contain only those parts of the meat that are perfectly soluble in water; to clear soup means to remove the insoluble albumen. What is left is gelatine with some colouring and flavouring matters, and how little of these last remain may be proved by making clear soup of meat alone without vegetables. A very pale and insipid liquid is the result. Meat soup, not clear, keeps more of the nourishment of the meat and often has perceptible pieces of meat-fibre floating in it, but here also most of the solid part of the meat is discarded, and, even if it remains, is overcooked so as to become innutritious and unpalatable.

203. **Bone Soup.**—Bones can be used for food only by making soup or stock from them. Gelatine is prepared from bones, but the bones that go into most private houses are just thrown away. One pound of meat has about the same food value as six or seven pounds of bone, and there is a distinct gain in using any food that

is generally lost. If a bone is soaked in weak hydrochloric acid, all the hard part is dissolved out; the bone still keeps its shape, but is pliable, and can be twisted in any direction. All that remains of it is good for food; it is chiefly gelatine. It would have been quite as easy to remove all the gelatine by long-continued boiling, and to leave nothing but the hard, earthy salts. The bone would still have kept its shape, but, instead of being pliable, it would have been brittle.

Bones should not be thrown away until they have been boiled for soup. When they are boiled enough, what remains looks porous, showing all the cavities that were once filled with gelatine.

204. **Is Soup Cheap?**—Meat soup is often recommended as a cheap food with questionable wisdom. Popular prejudices are often based on common sense, and prejudice, in this case, decides that the same quantity of meat affords more nourishment if it is cooked in any other way. Bones and vegetables, without doubt, make economical soups.

205. **How to Make Soup.**—For another reason bones and meat mixed do not make good soup. Gelatine is not completely extracted from bones except by prolonged boiling. "Digesters" make good soup from bones because the lid is screwed down and the contents heated under pressure some degrees above boiling-water point. But the albumen is best extracted from meat many degrees below boiling-water point, and (as has been remarked) to boil meat hardens the fibre and coagulates the albumen. Of course, in many cases, meat-soup is not made with any idea of economy. Bones should always be broken or crushed, meat cut small. They should be put into cold water with salt, to draw the juice out, and heated slowly. Vegetables should be added when the water boils, and needs continued boiling.

206. **Scum of Soups.**—Scum rises when the soup boils and if it boils fast, and to add salt or cold water makes it rise quicker. Scum is albumen, wasted food. If the soup is to be clear it must be removed, but

for economy's sake it is better to let the soup be thick and not to skim it.

STOCK.

207. **Stock.**—Stock means simply a broth made of meat or bones and flavoured with vegetables, and a stock-pot is the pot (or saucepan) in which the broth is made. Every cook should keep a stock-pot in constant use, and no special apparatus is needed. A pot made expressly for stock has a very tight-fitting lid, a hint that the lid should be kept on while stock is made, and not tilted on one side. Earthenware is the best material, because the stock can be left to cool in it, and need not be poured into a basin. Iron gives a very unpleasant flavour to its contents if they are left long in it, and, besides the trouble of emptying the pot every night, it wastes the stock. In winter the stock-pot may be boiled for several days or a week; in summer a few days will be as long as it can safely be left. Stock keeps better if it is made without vegetables. In hot weather it must be boiled every day and then left to cool; a lukewarm heat is that most favourable to fermentation. Into the stock-pot should be put all bones, cooked or uncooked, remains of gravies, bacon-rinds, scraps of meat and gristle, pieces of vegetable, (not cabbage,) with pepper and salt, and a suitable quantity of water. No scraps are too small or insignificant. However weak the stock may be, it is better for gravy than water, but the probability is that in an ordinary household it will not be weak, and the butcher's bill will be diminished to the extent of many pounds of gravy beef. If stock is needed for gravy, and none is at hand, it is better to make some of vegetables and sweet herbs only, rather than to use water. Brown onion skins will give the required colour. A very small piece of bone, or bacon-rind, or even a few fish-bones, will make half a pint of gravy, with judicious management.

208. **Stock for Clear Soup.**—No flour or potato

must be in it, or no boiling will make it clear. It may be made of meat or bones, cheaper of bones, but better of meat—when however strong it is it does not set with a jelly. Allow three-quarters of a pound of beef to one pint of cold water. Break the bones and take out the marrow. Cut up the meat and remove all the fat. Put the meat and bones in a clean, bright saucepan, with the water and salt. When it boils skim it carefully and add the vegetables, cut in pieces, peppercorns, a blade of mace, cloves, and a bunch of herbs and parsley. Let it simmer at least four or five hours. Strain through a cloth or hair sieve into a basin. Two carrots, one turnip, one shalot or onion, and one stick of celery or celery-seed will be sufficient for two quarts of water. Mushrooms, a tomato, an old fowl, lean ham, etc., etc., may be added to or substituted for the above ingredients.

209. White Stock.—Bones that have been half-boiled for brown stock, knuckle of veal or any white meat, a fowl, a cow-heel, with vegetables as for brown stock (not a tomato or brown onion skins) may all be put into white stock. It is used for white soups and sauces, and is not usually cleared. It should be made in an earthen or copper pan, as an iron saucepan blackens it.

210. Brown Soup (Thick).—Put into a large saucepan one ounce of butter or dripping. Slice an onion, a carrot, and two or three ounces of lean ham, or bacon, and fry them a light brown. Stir in two ounces of flour and brown it, then add two quarts of water and three pounds of shin of beef, or bone, or bullock's head. Let it boil, skim it, add salt, peppercorns, mace, cloves, and a few more vegetables cut in quarters. When it has simmered some hours strain it, take the fat off, and serve it with the vegetables cut small, or with a thickening of rice, maccaroni, sago, or corn-flour. The soup must be made to boil and the rice boiled in it for twenty minutes, maccaroni thirty minutes, sago ten minutes. Corn-flour must be mixed smooth with a little cold water and stirred into the soup. Some catsup or sauce will improve it.

211. **Clear Soup.**—Take the fat off the stock, if it is hot with paper, if it is jelly with a cloth. Some can be taken off with a spoon, but not a speck must be left, or the soup will not be clear. Dip the corner of a clean cloth in boiling water and wipe the jelly. There is no danger of using too much water, for it can easily be poured off. The fat sticks to the cloth. Warm water will not do. Do not make the surface uneven in skimming with a spoon, or you will have double trouble. To skim fat from a liquid any paper will do that is not printed; whitey-brown, such as comes off a draper's parcel, is best. Lay pieces of paper on the surface of the stock, and every speck of fat will stick to them. There is no excuse for sending greasy soups or sauces to table.

Pour the stock into a clean pan, neither iron nor rusty, add to each quart the white and shell of one egg, a quarter of a pound of scraped beef, a carrot, turnip, leek, and celery cut small, a bunch of herbs and parsley, salt and peppercorns, if needed. The scraped meat is not necessary, for the egg makes it clear, but it very much improves the flavour. The meat must be scraped with a sharp knife and every particle of fat and skin and sinew taken away. Whisk the whole over a good fire till it boils, then cease, and let it boil to the top of the pan. After it has stood by the fire for a quarter of an hour, strain it through a scalded cloth twice or oftener. The cloth must not be squeezed. It should be as clear as water. Wine can be added after. To double the meat and leave out the egg makes the best soup, but it is both troublesome and expensive. Clear soup has different names according to what is put into it. Sometimes savoury custard (see Index), cut into dice, is put in the tureen, and hot soup poured over, or carrots, turnips, and the green part of leeks, cut into threads about an inch long, and each boiled separately, may be served in the same way. Asparagus tops, French beans, and haricot beans are also used.

212. **Corn-flour Cream.**—Mix three tablespoonsful of corn-flour with a little cold water, and stir it into three pints of boiling white stock. Let it boil five

minutes, and stir it well. Mix in a basin the yolks of two or three eggs, and half a pint of fresh cream or new milk. Add the soup, put it again over the fire, and stir it till it nearly boils, but not quite, or the soup will curdle. Add pepper and salt, if needed; it should not be highly seasoned.

213. **Giblet Soup.**—Put into a large stewpan four quarts of water, pepper and salt to taste, and a few vegetables, a piece of sheep's pluck, and a few bones, cooked or uncooked. Let it boil six or seven hours, and strain it through a colander. Wash two sets of giblets, and boil them in water in a separate saucepan. Boil the gizzards first for half an hour, for they are often under-cooked. When the giblets begin to fall from the bones, add them to the stock. Thicken it with flour or corn-flour, add catsup, sauce, or port wine, and serve.

214. **Lobster Soup.**—Pound a tin of lobster, and rub it through a sieve. Melt two ounces of butter in a saucepan, add one and a half ounces of flour, and two quarts of hot stock. Take care there are no lumps of flour, or strain it. Then add the lobster, with cayenne and lemon-juice. Let it boil, and serve. Of course, a fresh lobster may be used instead of the tin.

215. **Mock Turtle Soup.**—Thoroughly wash a calf's head, and take out the brains. Put the head in cold water enough to cover it, and simmer it gently for two hours. Take it out, cut all the meat off the bones, and into small oblong pieces, and put it aside. Put the bones and trimming back in the stewpan, with cold water enough to make up nine quarts, eight pounds of shin of beef, a ham-bone, or some lean ham, four large onions, six carrots, four turnips, two heads of celery, salt and peppercorn, three blades of mace, twelve cloves, and a large bunch of herbs and parsley. Let it simmer eight hours, then strain the stock; and when it is cold, take the fat off.

Melt a quarter of a pound of butter in a large stew pan, add four or five tablespoonsful of flour, and the

stock, which must have been warmed. Let it boil, draw it off the fire, and put in the pieces of the head. Let it simmer about three-quarters of an hour, and skim it well. Just before it is ready for table, put in three or four dozen of small egg or forcemeat balls, the brains, and a pint of sherry, adding more seasoning if required.

The brains should be washed, and soaked in cold water, and then put into boiling water, and cooked five minutes. Cut them into small pieces, egg and bread-crumb them, and fry them a light brown in a saucepan of fat, or in a frying-pan with butter.

For the forcemeat balls take equal quantities of fine suet and bread-crumbs, half that quantity of veal and ham, pounded and rubbed through a sieve, salt and pepper, sweet herbs and parsley, with egg to bind the whole. Make it in balls about the size of a marble, drop them into boiling water, and poach five to ten minutes. When they float they are done. Drain them on a sieve.

For the egg-balls, the yolks of four hard-boiled eggs, with salt and cayenne, and the yolk of one raw egg to hold them together. Boil with the forcemeat. Mock turtle soup is now often served without either.

Two cow-heels substituted for the calf's head make a very good and inexpensive soup. The same recipe may be used or modified for tripe soup, much liked by some persons.

216. **Mulligatawny Soup.**—A fowl, or a rabbit, or a knuckle of veal, or a cow-heel. Boil whichever you use with a few vegetables until it is tender, and then cut it into nice-shaped pieces. Melt three ounces of butter in a stewpan, add two small onions and two apples, chopped very fine, with a carrot scraped or grated. Let these brown, then stir in two tablespoonsful of curry powder with one of flour; add enough of the stock the meat was cooked in to make the whole thin enough (about three quarts). Let it boil, add the pieces of meat, and throw in a teacupful of rice, washed and boiled separately. Any stock and pieces of cold meat

can be used. The meat will be tough if it is allowed to boil.

217. **Tinned Soups.**—Soups of many different kinds are now sold in tins. The overcooking characteristic of all tinned meats is no disadvantage here. They generally need to be mixed with water, or better with stock. Two or three quarts of broth taken from the stock-pot of a thrifty cook, with one or two tins of soup, and seasoning to taste, will make a capital tureen of soup, at a small cost. Tinned meats can also be made into soup with the addition of water and vegetables. The meat should be strained out.

218. **Vegetable Soups.**—Any vegetables may be used, dried or fresh. They are more nourishing and better-flavoured if stock, or pot-liquor, or a few bones and scraps of meat, be added to them, instead of water only. Mixed vegetables make better soup than one kind only. White soups must not be made in an iron saucepan, and ground black pepper must not be used, because it makes the soup look dirty. Cream always improves them, but skim-milk may well be used alone. All vegetable soups that are rubbed through a sieve must be well boiled after, or they will not mix. Boil the vegetables in water, then mash them and boil them again, stirring well. If they are too thick, add water, milk, or stock; if too thin, boil fast with the lid off. The soup must be boiled after flour, cold water, or milk is added to it, or the flour will go into lumps, and the cold liquid will not mix with the rest. All vegetable purées are made on this plan.

219. **Artichoke Soup.**—Boil two dozen artichokes in one and a half pint of water or white stock, and rub them through a sieve. Melt one ounce of butter in the saucepan, add a tablespoonful of flour, and the stock with half a pint of milk, or cream. Let it boil five minutes, season to taste and serve with squares of fried bread.

Spanish onion, potato, or turnip soup can be made in the same way. The onions and potatoes can be scalded first, if preferred.

220. **Haricot-Bean Soup.**—Soak half a pint of beans in cold water all night. Put them in one quart of cold water, pepper, salt, a pinch of soda, and two ounces of dripping. Boil about three hours, rub it through a sieve, and boil it again, adding milk to make it thin enough.

221. **Brown Vegetable Soup.**—Cut into small pieces half a cabbage, two carrots, one turnip, one onion or leek, French beans, peas with their shells, or any vegetables you may have. Fry an onion in dripping, add cold water, and when the water boils, put in the vegetables with a slice of toasted bread, pepper and salt, a little spice, and some Harvey Sauce, or catsup, if convenient. Let it simmer till the vegetables are tender, rub them through a sieve or colander, boil the soup again and serve with fried bread. If not brown enough it can be coloured with sugar. It should be quite thick.

222. **Carrot Soup.**—Boil the carrots with a small onion, a turnip, and a stick of celery in water or stock, and rub them through a sieve. Add more water, pepper, and salt, and boil again. Ten minutes before serving stir in a couple of tablespoonfuls of flour, mixed with a little cold water.

Or, melt two ounces of butter in a stewpan, add two ounces of flour and two quarts of brown stock. Stir till it boils, and then add six or eight medium-sized carrots grated on a bread-grater. When the carrots are tender the soup is ready.

223. **Pan-Kail.**—Wash half a teacupful of pot-barley and put it into a saucepan with two quarts of cold water, pepper, and salt, and two ounces of dripping. Wash and chop one small cabbage, two leeks, and a small turnip. Scrape with a knife or grate half a large carrot and put it aside; chop the other half, and, when the water boils, put it in the saucepan with the other vegetables. Boil two to three hours till the vegetables are tender, put in the scraped carrot, boil another half hour and serve. It should be quite thick. Any weak broth or pot-liquor may be used instead of water.

224. **Green Pea Soup.**—To one pint of shelled peas (use all the shells), add two sprigs of parsley, a sprig of mint, three leaves of spinach. Put about half the peas into boiling water, and boil them with the lid off the saucepan and keep them whole for garnish. Put the rest of the vegetables into boiling white stock, two or three pints, and boil till tender. Then rub them through a hair or tammy sieve. Put it back in the saucepan and boil it again, adding enough cream, or new milk, to make the soup a pale green colour. Lastly, add the whole peas and serve at once.

225. **Split Pea, or Lentil Soup.**—Soak the peas, or lentils, in cold water all night. Put them on the fire with a quart of water to half a pint of peas, one carrot, one onion, a large bunch of herbs and parsley, pepper, salt, and a pinch of soda. A few bones of roast meat, or the liquor in which ham or bacon has boiled, or a ham-bone should be used, if convenient; if not, put in a piece of dripping. Boil till tender, rub through a sieve, boil again, stirring well, and serve.

226. **Potato Soup.**—Wash and slice two pounds of potatoes, a leek, a stick of celery, and two small turnips. Small potatoes should be used, as they are not so good for boiling. Put them in a saucepan with two ounces of butter or dripping over a slow fire, but do not let them brown. Add three pints of milk and water, or white stock. Boil till tender, and rub through a sieve, the finer the better. Boil again and add more milk if necessary, with salt and pepper to taste. Cream put in just before serving is an improvement to the soup.

227. **Tomato Soup.**—Boil two dozen tomatoes with two or three onions and rub them through a sieve. A large tin of tomatoes will do instead. Add five pints of stock, with salt, pepper, and a little spice. Thicken with flour, and boil it ten minutes, or with rice, which is best boiled separately.

CHAPTER VIII.

MEAT.

228. **To Choose Meat** —The colour of beef and mutton should be purplish-red when it is newly cut, not pale pink, as is the case if the animal has been killed to save its life : not deep scarlet, as, in that case, death may have been caused by fever. The meat should not be moist, or feel flabby. Press your finger on the surface, and the indentation should not remain. Meat lying in a shop in a pool of liquid, or meat out of which juice runs before it is cooked, is not good, and not cheap, even though it may be low priced, because it will waste in cooking. The fibre of young and tender meat is not coarse, and in the best joints there should be little or no gristle and sinew.

229. **The Fat.**—The fat of beef should be mixed with the lean and present a marbled appearance; it should be yellowish white and opaque. If the fat is very yellow, the bullock was fed on oil-cake.

The fat of mutton is white and surrounds the lean. Transparent jelly-like fat denotes unwholesome meat.

230. **Veal.**—Veal is always whiter than beef, though its colour varies very much, even now that the custom of bleeding calves to make the flesh white is out of date. In some countries calves are killed very young for the market, so that the joints are very small and the meat is very white. Such meat is generally allowed to be difficult of digestion and is not met with in England.

231. **Pork.**—The fat of pork looks more transparent. The lean should be white, with fine fibres, and the rind or skin of a young pig is thin.

232. **Hams.**—Before selecting a ham run a long knife in close to the bone. If it smells rancid and looks

oily the ham is not good. Very dry and hard hams are apt to be over-salt, and to require much soaking.

233. **To Keep Meat.**—Meat must be kept in a cool, dry place out of the sun. The larder should be well ventilated, a draught of air blowing through from end to end. Neither meat, nor anything else, will keep in a larder or cupboard that smells close and stuffy. Hang the joint up instead of letting it lie on a board or dish. In the summer it is necessary to hang it in a wire meat-safe so as to keep the flies away. Meat is dredged with flour to preserve it by keeping the surface dry. Suet will keep for a long time if covered with flour. Meat for a pie should be cut up and seasoned with salt and pepper. If there are any kernels in the fat they must be removed, as they first become tainted. Veal and lamb do not keep so well or so long as beef and mutton, because of the larger amount of water they contain. The joints must be frequently wiped. Some epicures prefer the flavour of mutton when it has hung so long as to become somewhat tainted; no one chooses beef, veal, or pork that is not quite fresh.

234 **As to Washing Meat.**—Never wash meat unless compelled, as it washes away some of the flavour, and wet meat never browns properly. Scrape it rather with a knife. If it is tainted wash it in vinegar and water, or charcoal and water. Cut off every piece that is tainted and dry on a cloth. Salicylic acid is much recommended—half-teaspoonful to one quart of water—as a wash for tainted meat.

235. **Preserved Meat.**—Meat is preserved by several processes. The most common is by salting, which acts in part by removing some of the water present. Salt and sugar have power of preventing decay. The water is drawn out of the meat, and dissolved in the water is some albumen and also certain salts and flavouring matter. Since there are no means suitable for household use of extracting the dissolved albumen from the brine, the whole of it is lost. Salt meat, therefore, is not an economical dish. In many cases the loss of salts may be supplied by fresh vegetables; but where these can-

not be obtained—as, for example, on board ship—some disease of malnutrition is sure to appear as the result of a prolonged salt meat diet. It is well known that scurvy, which was once the scourge of seamen, has, to a great extent, disappeared, not because salt meat is disused, but because lemon-juice, or other anti-scorbutic, containing the salts that are wanting in the meat, forms now a necessary part of every ship's store. Nothing can be said against salted fat meat on the score of economy, because the fat has little or no soluble matter to lose in salting.

Bacon and hams are generally smoked or dried, to improve both flavour and keeping power. The smoke of burning oak-wood is employed. A preparation of creosote is sold in bottles, under the name of "patent smoke," that answers the same purpose, and is easily applied.

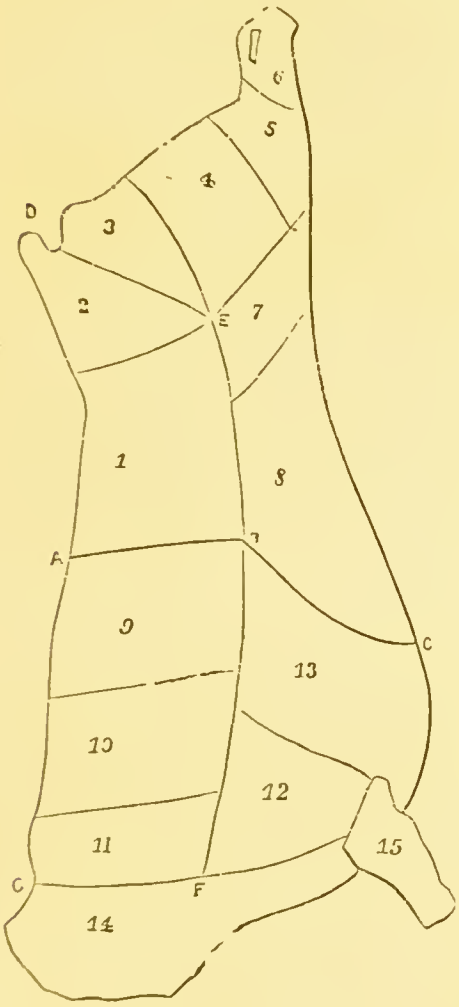
Meat is also preserved by keeping the surrounding temperature just below that point where any of the lower forms of life can exist. The meat is not frozen, as is commonly supposed; air is freely supplied. It does not keep long when restored to an ordinary temperature. It is in this way that American and Australian fresh meats are brought to England.

Another method is to exclude air. Meat free from bone is put into tins, which are then placed in a bath of some chemical substance and water that is capable of being heated several degrees above boiling-water point. The air is expelled by the heat; and when no more air remains, the tins are quickly soldered. The sides of the tin sink in, owing to the shrinking of the contents when cold, and the pressure of the outside air. The drawback is that these meats are over-cooked and over-heated, so that they are tough and stringy. Other methods have been tried less successfully, such as coating the joints with gelatine, collodion, charcoal, etc.

236. **Putrefaction.**—We see that three conditions are necessary for the putrefaction of the meat—the presence of air, a certain degree of temperature, some moisture. When any one of these conditions is absent, the meat is preserved.

BEEF.

237. **Beef.**—Beef wastes rather less in cooking than mutton, and much less than pork. It is generally considered the most nourishing, and is certainly the most economical meat.



BEEF.

238. **How to Cut up Beef.**—It is generally cut into joints, according to the engraving.

1. Sirloin. The best piece of roasting beef, but not the most economical, because of the price charged for this joint, and the large amount of bone. Two sirloins cut together form a baron, a joint corresponding to the saddle of mutton. The under-cut of the sirloin is suitable for entrées, fillets of beef, etc., but is not always obtainable.

2. Rump. Generally used for broiling-steaks, which should be cut evenly, and about one and a half inch thick. A high-priced joint.

3. Aitch-bone. 4. Buttock. Both these joints are best suited for boiling or stewing, but are occasionally

roasted. The buttock is more economical, because less bony.

5. Mouse-round. Only suitable for stewing or boiling. The silver-side of the round is usually salted.

6. Hock. It is too sinewy and tough to be used for anything but stews and soups.

7. Thick Flank. Best boiling piece. Sold also for an economical roast. No bone.

8. Thin Flank. A low-priced joint. Good for boiling, stewing, pies, etc.

9. Fore-rib. The best roasting meat, and does not contain so much bone as the sirloin. Has no under-cut like the sirloin.

10. Middle-rib. Not so good as the fore-rib, though often sold in its place. Should be lower priced, and so more economical.

11. Chuck-rib. Sold for roasting, but inferior to the above. A joint from the worst end of the ribs may be distinguished by a thick strip of yellow gristle, that runs round it about an inch from the surface.

12. Leg of Mutton Piece. Beef-steaks are cut from this part. Contains no bone, and is not among the highest priced joints, though the meat is tender and juicy. Very economical for roasting, boiling, pies, etc. Never very fat.

13. Brisket, or Breast. Too tough to roast; is used for salting, stewing, or boiling. Rather fat.

14. Neck, Clod, and Sticking-piece. Inferior joints, that can be used only for soups, stews, or puddings.

15. Shin. A very low-priced joint, suitable for soups and stocks, and may be made tender and palatable by long-continued stewing.

239. **Head of Beef.**—The head, or half head, is sold separately. Is economical on account of its low price, and can be slowly stewed, or made into soup and stock.

240. **The Heart.**—The heart needs long-continued cooking to make it palatable or digestible; and the same

may be said of the kidneys, which are used for puddings, pies, stewing, and soups.

241. **Sweetbread.**—Bullock's sweet-bread is constantly sold in the place of calf's sweetbread. It needs much longer and more careful cooking, and is never so delicate in flavour.

242. **The Liver.**—The liver is coarse in texture and flavour, and eaten only from motives of economy.

243. **The Foot.**—The foot is sold as cow-heel, and may be used with advantage in the preparation of jelly, as a substitute for the more expensive calf's foot. It is sold with the skin on, blanched and cleaned, and also by the tripe-dressers, with the skin off and partially-boiled, at a much lower price. It is best to buy it with the skin on if possible, and it is a very economical purchase, capable of being used in a variety of stews, soups, and jellies.

244. **Tripe** is sold only by the tripe-dressers, partially boiled. Is said to be the most digestible of meats, and is used for invalids and entrées as well as by the poor.

245. **Boiled Beef.**—If salt, to be put into cold water; if fresh, into boiling. Allow twenty minutes to each pound and half an hour over for salt meat, rather less for fresh. Carrots, turnips, onions, celery, and sometimes suet-puddings, are boiled and served with the beef. (See Boiling, page 21.) Serve with a little of the liquor poured round and keep the rest for soup. Boiled fresh beef is seldom eaten in the neighbourhood of London, but is common in Scotland and on the Continent.

246. **Broiled Steak.**—(See Broiling, page 19.) A beefsteak is generally served without sauce. Dish it on a hot plate. Mix together on a plate one ounce of butter, one teaspoonful of chopped parsley, and half a teaspoonful of lemon-juice. Rub this over and serve at once. Fresh butter alone may be used. Tomato or oyster sauce is sometimes sent to table with it.

247. **Fried Steak.**—An imitation of broiled steak,

and not so good. To be served in the same way. (See *dry* Frying, page 24.)

248. **Fillets of Beef.**—The under-cut of the sir-loin is to be preferred: a nice shaped steak will do. Cut into thin slices, about four inches square, and half an inch thick, and lard them, as below. Put them into a pan with a very little good stock, some vegetables cut small, and braise them according to directions on page 27. They will take three quarters of an hour to stew and a few minutes to brown. Serve in a circle, with glaze poured round and the centre filled with tomatoes or mixed vegetables.

To lard anything one must have a larding-needle sold for the purpose (see Plate II.). Cut some fat bacon into small strips, across the grain of the meat, about an inch long. Place the end of the bacon in the cleft end of the needle and run the needle into the meat. As it is pulled through, the bacon will be left behind, threaded into the meat. The bacon should be run in equally in rows, and the needle must be set across the grain of the meat or it will break out. It is to be understood that both ends of the bacon appear on the same side of the fillet. About three rows for these fillets of beef.

249. **Bullock's Heart.**—Soak it in salt and water for several hours, wash it thoroughly and cut out the arteries, leaving only a flap to enclose the stuffing.

Mix a cupful of bread-crumbs, a cupful of chopped suet, a tablespoonful of parsley, a dessert-spoonful of herbs, pepper, salt, a little spice, and some cold milk. Stuff the heart with this, sew the flap over with a needle and thread, and roast before the fire with the thicker end upwards, or in the oven, for about two hours. It must be thoroughly cooked.

For the gravy, boil the arteries with one and a half pint of water, one carrot, one turnip, one onion, pepper, and salt. Strain this. Fry an onion in half an ounce of dripping, add one ounce of flour, and the stock. If not brown enough, colour with catsup, sauce, or browning, and pour it round the heart.

Sheep's heart may be cooked the same way, but it is better roasted in a saucepan, and much less stuffing is needed. It takes half to three-quarters of an hour.

250. **Kidneys Stewed.**—Wash them well, cut them in small pieces, roll them in flour, and brown them in a stewpan, with a little dripping, and a small piece of onion, if approved. Then add cold water enough to cover them, pepper and salt, and stew very gently for one hour. Then stir in a teaspoonful of flour mixed with cold water, a little catsup, and boil it just enough to thicken the gravy. Pour it into a dish and garnish with a sprinkling of chopped parsley.

251. **Mince Collops.**—Mince half a pound of fresh beef very fine and put it into a stewpan with one ounce of butter, a very little flour, pepper, and salt. Put it over a slow fire, stir and beat it so that it does not go into lumps, and let it cook half an hour. Serve with a garnish of fried bread, or toast.

252. **Beef Olives.**—Cut three-quarters of a pound of beefsteak into squares half an inch thick and three inches across. Flatten them with a chopper dipped in cold water. Make a stuffing with two ounces of bread-crumbs, one ounce of suet, one ounce of ham, or bacon, a teaspoonful of herbs and parsley, the trimmings of the meat, the rind of a lemon, a little vinegar, pepper, salt, nutmeg, and one egg or a little milk. Shape this into pieces the size of a cork, roll the meat round each and tie it with string. Put them into boiling-stock enough to cover them, and stew gently for one hour. Then melt one ounce of butter in another saucepan, add one ounce of flour, half a pint of the stock, and a table-spoonful of catsup or sauce. Let it boil. Make a small mound of mashed potato in a dish, untie the strings and arrange the olives in a circle on the potato. Pour the gravy over, fill the centre with vegetable, and serve hot.

253. **Beef Pie.**—Fill the pie-dish with beef or rump-steak, cut into small pieces and rolled in flour. Season with pepper and salt. Pour a little water over. Cover

with a suet or flaky crust, and bake in a good oven at first, afterwards in a slow one. Hard eggs, slices of potato, maccaroni, or kidney are sometimes mixed with the meat.

254. Pressed Beef.—Remove the bones from a piece of the thin flank. Pickle it as directed below. Sprinkle it with sweet herbs, dried and pounded, chopped parsley, and allspice. Roll it tightly and tie it with tape. Put it into cold water enough to cover it, with a wineglassful of vinegar and a few vegetables. Bring it to the boil very slowly, and let it simmer until it is tender. Then leave it in the pickle, with a weight on it, till cold. Remove the tape and serve garnished with parsley. It looks better if a little glaze is poured over. Glaze is sold in sausage skins. It should be warmed and applied with a brush. For the pickle, take one gallon of water, two pounds of common salt, or rather less of bay-salt, one pound of coarse sugar, half an ounce of black pepper, and the same quantity of mixed-spice, bruised and tied in muslin, and two bay-leaves. Boil together twenty minutes, skim well, and, when cold, put in the meat, which must be covered. The thin flank will be ready in ten days.

255. Beef Pudding.—Grease a basin, and line it with suet paste. One and a half pound of flour will line a quart basin. Cut the beef into small pieces, roll it in flour, and season with pepper and salt. Fill the basin, and pour in a very little water. A few oysters or mushrooms will improve the pudding. Roll out the trimmings, wet the edge, and cover the top. Dip a cloth in boiling water, flour it, and tie it over the pudding. Put into boiling water, and boil three hours. Let it cool before turning out, or it will burst.

256. Roast Beef.—The time required varies with the shape of the joint, as well as with its weight. Generally allow a quarter of an hour to a pound, and a quarter of an hour over; rather more for a very thick joint. For the gravy, take up the meat, pour the fat from the dripping-pan, leaving the brown pieces; pour in some

boiling water and salt, stir thoroughly, and strain round the meat. To pour boiling water over the joint is bad, because it washes off what should be left. A thickening of flour may be added, then the gravy must be boiled in the pan over the fire. Garnish with horse-radish. (See p. 20.)

257. **Savoury Roast.**—A piece of beefsteak, cut of even thickness, sprinkled with breadcrumbs, sweet herbs and parsley, pepper and salt, rolled and tied with string, then roasted in a saucepan. (See page 21.) To be served with a brown gravy poured round. A much less wasteful way than frying the same.

258. **Stewed Beef.**—Take one pound of beefsteak, cut off the fat, flour it, and fry it with an onion, with a little dripping, in a saucepan. Then add cold water or broth enough to cover it, and a few vegetables cut small. Stew it gently two or three hours. Fry an onion in butter or dripping, add one ounce of flour, and three-quarters of a pint of the stock. Boil, thicken, and colour the gravy. Dish the steak, pour the sauce over, and garnish with some vegetables of any kind, boiled separately, as those cooked with the beef will not be tender unless they were boiled fast for a time, and that spoils the steak. The fat that was cut off should be cooked in the oven, and put on the dish as a garnish. Cooked in the stew, it makes it greasy. A little vinegar makes the meat tender.

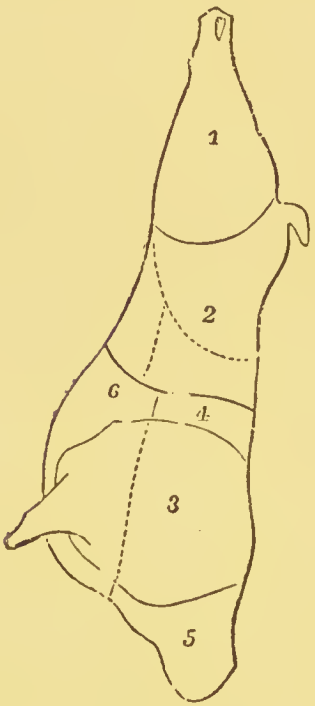
259. **Brazilian Stew.**—Cut one pound of shin of beef into small pieces. Lay them in a jar or stewpan, with alternate layers of vegetables cut small, pepper and salt. Some pot barley or maccaroni may be added. Pour over all a teacupful of vinegar and water. Cover and cook very slowly on the fire or in the oven for three or four hours.

260. **Tripe, to Cook.**—Put it into cold water, let it boil, throw the water away, and scrape and clean the tripe thoroughly. Then cut it in square pieces, put it into more cold water, and stew it until thoroughly tender. Dip it in batter, or egg and breadcrumb, and fry in a saucepan.

Or, having cleaned it and cut it in pieces, roll each one up with a slice of bacon, and a seasoning of parsley and sweet herbs. Stew it in stock one and a half hour, with three or four carrots. Dish on a circle on mashed potato, pour a white or brown sauce over, and garnish with the carrot rubbed through a wire sieve into the dish.

MUTTON.

261. Mutton.—Mutton is often recommended to invalids as the most digestible meat. It is not so economical as beef, because, although sold at about the same price, the joints, as sent from the butcher's, contain a larger proportion of bone, and it also wastes rather more in cooking.



MUTTON.

262. How to Cut Mutton.—Mutton is sold in these joints :—

1. Leg. The most economical, because the least bone and the least fat. Good for roasting or boiling. Sometimes divided, to boil or stew the knuckle end, and to roast the remainder. Mutton steaks are cut from the leg.

2. Loin. Usually roasted. The best end of the loin is furthest from the leg; the chump end is very bony.

The hind quarter of lamb and the haunch of mutton comprise both the leg and the loin.

3. Shoulder, roasted or stewed. More fat and bone and less economical, though lower priced, than the leg.

4. The Best End of the Neck, to be chosen for

mutton cutlets in preference to the loin. Is often a too fat joint.

5. The Scrag, or worse end of the neck, is only fit for boiling or broth.

6. Breast. This is the lowest priced joint; contains much bone and fat. May be stewed or boiled with advantage.

The fore-quarter of lamb comprises the shoulder, neck, and breast.

The head, heart, liver, and lights, or lungs, may be bought each separately, or all together, as "sheeps' pluck," for a very moderate cost. The whole of it is commonly eaten, and may be prepared in a variety of ways.

Lambs' fry and lambs' sweetbreads are considered delicacies.

The feet, or trotters, are generally sold apart, sometimes with the head. They need long stewing to make them palatable.

Small-boned, old mutton is the best. Southdown and Exmoor mutton is most highly esteemed.

263. **Boiled Leg of Mutton.**—Weigh it, and allow twenty minutes to every pound, and twenty minutes over; rather less if it is small, or to be under-done. Put it into boiling water enough to cover it, and let it boil ten minutes; then put in a little cold water, skim it, and do not let it boil again, or it will be tough. Boil some carrots, turnips, and onions with it, and serve them as garnish with some fresh parsley. Pour over a little white sauce or caper sauce, and send a tureen of the same to table with it. Lamb takes rather less time in proportion to its weight.

264. **Broiled Chop.**—Same as for steak. Takes about eight to ten minutes, and must be turned four times.

265. **Cutlets.**—Choose a small, lean neck of mutton or lamb. Saw off the chine bone, and the ends of the chops. Cut each cutlet with a bone if they are not too thick, or every other one with a bone if the mutton is large. Flatten them with a chopper dipped in cold

water, cut the skin away from each side of the bone, and leave about half an inch of the end of the bone bare. Then cut away the outside gristle and fat, and some of the fat near the bone. The eye of the chop must not be touched, nor should the lean alone be left, and the whole of the fat be cut off.

Dip each cutlet in egg, and cover it with bread-crumbs. Melt three ounces of butter in a pan (a copper pan by choice), lay in the cutlets, and fry them on both sides a pale brown. Drain them on paper, arrange them in a circle with the bones towards the middle, fill the centre with vegetables, and pour a gravy round. Sometimes they are served without gravy. Onion, tomato, bechamel, piquante, and other sauces, are used.

266. **Haricot Mutton.**—Take two pounds of neck or breast of mutton, cut it in pieces, flour them, and fry in a little fat. Fry also two carrots, one turnip, one onion, and a stick of celery cut small. As soon as the meat is brown, add hot water enough to cover it, and let it simmer gently by the side of the fire for two to three hours. Skim off the fat, add some catsup, and serve.

267. **Sheep's Head.**—Cut out the eyes, nose, tongue, and brains, and wash the head thoroughly in salt and water. Tie it with string, and put it into a saucepan, with cold water enough to cover it and the tongue. When the water boils, skim it, add salt, pepper, a blade of mace, an onion stuck with three cloves, three carrots, two turnips, and a bunch of parsley and herbs. Simmer for three hours; then take out the head, and put it on a flat dish, cover it with browned breadcrumbs, and a few pieces of dripping, and brown it before the fire or in the oven. Boil the brains in boiling water for ten minutes, and chop them; then make some good brown gravy, and put the brains in, with a teaspoonful of chopped parsley and some catsup. Dish the head, pour the sauce round, and garnish with the vegetables. The tongue must be peeled, and served with the head. The broth can be thickened with rice, flour, etc., and served separately.

Instead of browning the head, it can be served plain boiled, with white brain sauce poured over, and a garnish of vegetables and fresh parsley.

263. **Irish Stew.**—Peel potatoes about equal in weight to the meat you intend to use, and slice them, but not too small. Cut the neck or scrag of mutton in pieces. Put the meat and potato in alternate layers in a saucepan, seasoning with pepper, salt, and a sliced onion. Pour over a teacupful of water, and simmer three to four hours. The flavour is less strong if the onion is scalded and the potatoes parboiled. Cold meat can be used, but then the vegetables also must be cooked.

269. **Kidneys.**—Three or four sheep's kidneys make a small dish. Wash them, split them along the round side down to the root, but without dividing them, and fasten them open with a skewer. Broil them over the fire, cooking the inside first. They take about eight minutes. Serve on buttered toast on a hot dish, with a piece of butter on each. Fried bacon is often served with them. They are often fried in butter or dripping, and served in the same way.

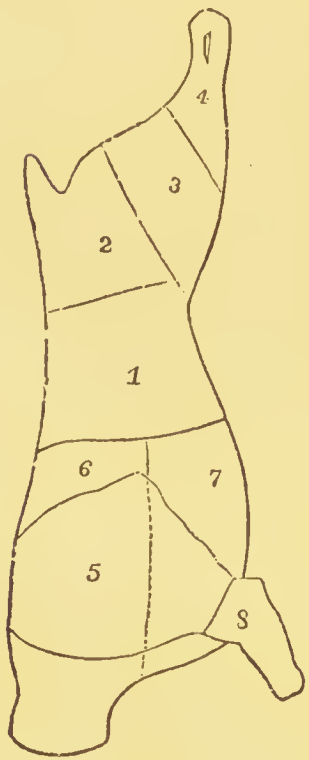
270. **Liver and Bacon.**—Wash some sheep's liver, and dry it on a cloth. Cut it in thin slices, and roll each slice in a mixture of flour, pepper, and salt. Fry some fat bacon in a pan, and keep it hot. Fry the liver in the bacon fat about seven minutes. When it is done, it looks white when cut. It must be well cooked, or it is indigestible. Mix the rest of the flour (one dessert-spoonful) with half a pint of cold water, and pour it into the pan. Let it boil and thicken. It should be well coloured. Dish the liver in the centre with the bacon round, and strain the gravy over.

271. **Roast Mutton.**—The same as for beef. Loin of mutton is served with red currant jelly.

272. **Stuffed Mutton.**—Bone a loin or neck. Make stuffing with three ounces of breadcrumbs, two ounces of the kidney suet, one teaspoonful of chopped parsley and herbs, pepper and salt, one egg or cold milk, and grated lemon-peel. Put this in the meat, roll, and tie

it with string. Roast as above, and serve with currant jelly. Very good cold.

273. To Clarify Mutton Fat.—Cut small any pieces of fat, cooked or uncooked, and put them in a saucepan with a little cold water. Boil it until all the water has evaporated, and the fat is melted, nothing remaining solid but the scraps of skin and lean. Let the fat cool, and then strain it through a strainer. Keep the scraps to use in the place of suet. The melted fat when cold should be perfectly white. It is economical to cut the fat from a joint, and to melt it down, rather than to cook so much on the joint that it cannot be eaten. Trimmings of joints and scraps of fat can often be bought at the butcher's at a low price. Mutton fat is best for frying; beef tastes better in puddings or pastry; but either will do, or the two mixed. It is better than roast meat dripping for most purposes. To clarify dripping, heat it, and pour it into cold water. If it is much burnt a small piece of soda may be added.



VEAL.

VEAL.

274. Veal.—The flesh of the calf is less nourishing and less digestible than beef or mutton, probably because the softness of the fibre makes it difficult of mastication.

The various joints are indicated opposite.

1. The Loin. Best roasting joint. Cut with the kidney and kidney suet.

2. Chump End of the Loin. Less tender and more bony; lower priced than best end.

3. Fillet. Roasting joint, and more economical than loin. Veal cutlets are taken from this part.

4 and 8. Knuckle. Must be stewed or boiled, as it is very sinewy and hard.

5. The Shoulder. May be roasted or boiled.

6. The Neck. Generally roasted.

7 The Breast. Is used for roasting, stewing, and braising.

275. Calf's Feet.—These are sold for jelly or for stewing. They are more delicate than cow-heel.

276. Calf's Head.—The head is boiled or stewed with the skin on, or made into mock turtle soup.

The liver, heart, sweetbread, are served in many ways as entrées, roasts, etc.

277. Braised Breast of Veal.—Bone a breast of veal. If convenient, it is improved by larding (see page 99); if not, cut two thin slices of bacon and lay it inside the meat. Make a stuffing as for mutton (page 105), roll the meat, and tie it with string. Braise it according to directions. It will take two to three hours. Reduce the gravy it has been cooking in to less than half the quantity, and pour that round. Garnish with any vegetables that may be in season, and serve hot.

278. Veal Cutlets.—Trim them all the same size and shape. Dip them in egg and breadcrumb, and fry in butter a very pale brown. Mix a teaspoonful of flour with a teacupful of stock or water, pour it into the pan, boil, and strain it round the cutlets. Garnish with fried bacon and vegetables.

279. Cutlets à la Milanaise.—Dip the cutlets first in melted butter, then in grated Parmesan cheese, then in egg and breadcrumb. Fry them in butter. Dish them in a circle with boiled maccaroni in the centre, and a tomato sauce poured over the cutlets. The sauce should be thick enough to adhere to the cutlets. Lamb or mutton may be served in this way.

280. Boiled Calf's Head.—Take half a calf's head, and, with a sharp knife, remove the flesh from the bone. Make some stuffing with two ounces of suet, two

ounces of breadcrumbs, chopped parsley, herbs, lemon-rind, pepper, salt, and one egg. Put this into the head and roll it very tightly in a cloth, tying it with string. Put both the head and the bones into a stewpan with four quarts of cold water and a few vegetables and let them stew very gently about two and a half hours. Then take the head out of the cloth, brush it over with egg; cover it with browned breadcrumbs and put it before the fire, or in a hot oven, for a few minutes. Serve it hot with tomato-sauce, oyster-sauce, or good brown gravy flavoured with sherry and lemon juice. A little should be poured round and the rest served in a tureen. Skin the tongue and use it as a garnish. The brains must be scalded and either boiled for ten minutes, or covered with egg and breadcrumb and fried. Use them also as a garnish. The liquor will serve for mock-turtle soup.

281. **Raised Veal-Pie.**—Make a crust, as directed for a standing-pie in a tin, and line the tin throughout. Pour a little gravy in to ascertain that it holds water. Cut the veal into dice and add a little lean ham, pepper, salt and nutmeg. Put on the top crust, ornament it with pastry cut in various devices, and bake about one and a half hour in a slow oven. Meanwhile, reduce a pint of good stock, add a wineglassful of wine and enough gelatine to make a stiff jelly. When the pie is baked raise one of the ornaments and pour in the gravy. Let it stand till cold and then take off the tin. To be served cold.

282. **Roast Veal.**—Allow twenty minutes to each pound and twenty minutes over. It must not be underdone. The bone is generally removed from the fillet and its place filled by forcemeat, the same as for stuffed mutton. The forcemeat is made into balls and fried, or roasted in the pan to serve with the neck and loin. In the place of gravy a little melted butter is poured over the joint just before serving.

283. **Stewed Knuckle of Veal.**—Put a small piece of knuckle of veal into a saucepan with boiling water enough to cover it, peppercorns, salt, and a blade of mace. Draw it back from the fire and do not let it

boil again. Simmer for two hours. An hour and a half before it is ready put in a teacupful of washed rice or a quarter of a pound of Naples maccaroni. Serve with the maccaroni or rice in the same dish, and tomato sauce or parsley and butter poured over.

284. **Sweetbreads.**—Wash them and soak them in salt and water for an hour.

Bullocks' sweetbreads must be soaked a long time to make them palatable.

Then put them into boiling water and boil gently until they are tender. Let them cool, cut them in slices, egg and breadcrumb each, and fry in a saucepan. They can be fried in a frying-pan, and then need less boiling. Garnish with fried bacon and cut lemon. Or, stew them for half an hour in white stock, drain them, thicken the stock with butter and flour, add two tablespoonfuls of cream, lemon-juice, and half a teaspoonful of chopped parsley. Warm the sweetbreads in the sauce and serve.

PORK.

285. **Pork as a Food.**—Pork is less digestible than other meats, because the fibre is close and difficult of mastication. The meat is less wholesome if the pig has been fed on garbage and kitchen refuse, instead of barley-meal. It is generally salted and sold as ham or bacon.

286. **The Joints of Pork.**—The joints are outlined on engraving.

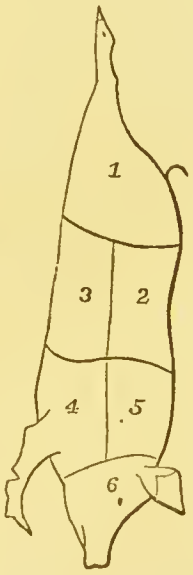
1. Leg; most economical and least fat for roasting.

2. Loin; considered the best roasting piece.

3. Spring, or belly.

4. Hand; often sold slightly salted for boiling. The forequarter is less expensive than the hind quarter.

5. Foreloin; used also for roast-



PORK.

ing. The hand and foreloin together make the gammon.

6. Face, or cheek; used for brawn. More often salted and smoked.

Every part of the pig is used as food.

287. **Streaky Bacon.**—This is generally chosen for broiling, and is cut from the spring. If fat be desired, the foreloin should be chosen.

Pork needs thorough cooking, and always takes longer than the same weight of beef or mutton.

288. **Boiled Bacon.**—If very salt, soak it in water for several hours. Cut off any part that is rusty, and scrape the underside clean. Put it into cold water, let it come very slowly to boiling point, and simmer very gently till done. Allow about twenty-five minutes to each pound, and twenty-five minutes over. When it is done, the skin can easily be pared off. Sprinkle it with bread-raspings or browned breadcrumbs.

Ham is boiled in the same way. Allow from two and-a-half to five hours, according to size. Let it cool in the liquor after the rind is stripped off. The flavour is better if, instead of boiling, the ham is enclosed in a crust of flour and water, and baked in the oven. The crust is, of course, to be stripped off with the rind.

289. **Boiled Pork.**—This is salted but not smoked meat. Put into cold water and simmer gently, allowing twenty minutes to each pound, and twenty minutes over. Carrots, turnips and parsnips to be boiled and served with the joint.

290. **Brawn.**—Boil a pig's head in water until it is tender. Take off the skin and line a basin with it. Cut the meat into "dice," and fill the mould with alternate layers of fat and lean, seasoning each with pepper and dried sage. When the mould is full, put a small plate and a weight on the top, and leave it till it is quite cold. If more lean is liked, one or two sheeps' or pigs' tongues can be added.

291. **Pork Chop.**—Same as for mutton, to be cooked half as long again.

292. **Pork Pie.**—Make a crust as directed for a standing pie. For one pound of meat allow one pound of flour; to two pounds, one and-a-half of flour. The smaller ones are easier to shape. Cut the pork into small pieces, season with pepper and salt, and a little dried sage and sweet herbs, if approved. Put aside one-third of the paste. Shape the rest with your hands, taking care not to make the bottom too thin, not to leave any cracks, and to get the sides as tall as possible. Put in the meat and press it down. Egg the edge of the top, put on the cover, and cut it round with scissors. Ornament the top and sides in any way you like, cutting the paste into grapes, roses, etc. Bake in a slow oven one and-a-half hour. Pour in a little gravy when it is cooked, and serve cold.

293. **Roast Pork.**—Allow twenty minutes to each pound, and twenty minutes over. Do not let the fire be so hot as to burn the crackling, if there is any. A piece of paper may be wrapped round the joint and removed ten minutes before serving, that the joint may brown. Pork is stuffed with sage and onions. Parboil two large onions and chop them with a sprig of sage. Add two ounces of breadcrumbs, one ounce of butter or dripping, pepper and salt. One egg may be added to half the quantity, but it is not necessary. Serve with apple sauce in a tureen.

294. **Sausages.**—Home-made sausages are often cooked without any skin. (Six, sometimes eight make a pound.) If they are soaked in hot water, the skins will come off. Prick the skin in several places, and put them into a cold fryingpan. Let them heat gradually. When they are brown they are done. Serve on toast, pour a little hot water into the pan and pour it round. Spite of pricking, they will burst, if much bread has been put into them, as often happens.

TINNED MEATS.

295. **Tinned Meat.** — Motives of convenience, rather than of economy, lead one to use tinned meats.

It is one of those cases where chemical analysis tells only half the truth. In the tin is the whole of the meat except the bone, and yet experience shows that it is of less food value than its weight of ordinary butcher's meat with bone, probably less than even its money value in meat although its price is low. It is over cooked in the only process to be depended on for driving out all the air. Half is reduced to gravy, which like all liquid food, is too quickly digested; and of the rest, the lean appears as indigestible fibres, while the fat is melted down to dripping. Nevertheless, for convenience or for variety's sake, a considerable quantity is eaten.

296. **Cooking of Tinned Meats.**—In cooking it, the great thing is to warm it and no more. Any recipe that gives directions for long cooking, must be wrong, because it exaggerates its original fault. It is often tasteless, therefore it may well be highly seasoned and flavoured with sauce, catsup, cayenne, as taste may dictate. Wherever practicable, it should be minced finely, to conceal its fibrous texture. The fat must be removed from the tin, and when clarified, may be used as dripping.

Bearing these rules in mind, tinned may be substituted for cold meat, in any of the recipes here given. One tin varies so much from another of the same sort, that is impossible to recommend any special brand. The roast beef is often excellent, though the flavour bears little resemblance to that promised by its name. In summer it may best be served cold with a salad and mayonnaise sauce.

The corned beef is a different preparation. The meat is slightly salted, pressed into a solid block, and is less cooked. This is both popular and cheap, but from its saltness is not so well adapted for cold meat cookery.

No tin is good if it bulges out at the side, as this shows a formation of gas from the decomposition of the meat after the tin was closed. Both meat and fish in tins are occasionally bad, and show no sign of it until

the tin is opened If there is any suspicious smell or unpleasant taste, the tin must be thrown away. To eat the contents of a tin not perfectly fresh is sure to occasion serious discomfort.

297. **Balls of Meat.** — Take equal quantities of chopped meat and breadcrumb, half that of suet or fat, some chopped parsley and herbs, pepper and salt, a little nutmeg, lemon peel, and enough cold milk to mix the whole. Shape it into small pyramids with your hands floured, dip each one in milk, roll it in flour, and fry in a saucepan. Stick a parsley stalk into each and serve hot, either on a napkin, or with brown gravy round.

298. **Croustades.**—Make cases of bread as directed for cheese patties on page 37, cutting them the size of a teacup. Make half a pint of bechamel sauce, add to it a few slices of cold roast veal and lean ham chopped fine, three or four mushrooms, and the juice of half a lemon. Warm the whole, fill the cases, and serve hot. Tinned or fresh oysters may be pounded and used for this recipe.

299. **Cutlets.**—Take the remains of a neck or loin of pork or mutton, and trim it into cutlets. Egg and breadcrumb them, and fry in a saucepan. Serve in a circle, with spinach or other vegetable in the centre.

300. **Croquettes of Meat.**—Mash some potatoes while hot, mix with them a little boiling milk and butter, salt and cayenne. Mince a little cold meat of any kind, season with salt and pepper, and add a little broth or stock, that it may not be too dry. When the potato is still hot, flour your hands, and shape it into balls, putting a little of the mince into each. Egg and breadcrumb, and fry in a saucepan. Pour a brown gravy round, and serve hot.

301. **Meat Fritters.**—Into three ounces of flour stir a dessertspoonful of oil or oiled butter, half a gill of warm water, and a pinch of salt. Whip the white of an egg, and stir it in lightly. Cut the meat in thin slices, dip each in the batter, and fry in a saucepan, without a

basket, as the batter sticks to the wire. All fritters are made in the same way.

302. **Hash.**—Make the gravy first quite separately, then put in the meat, and warm it, but do not let it boil even for a minute. The excellence of a hash depends upon that of the gravy. A good cook has always a little stock at hand; but suppose you have none, some must be made with the bones and trimmings of the meat, vegetables, herbs and parsley, pepper and salt. These should boil an hour or more. Fry an onion in a little butter or dripping until it is quite brown, mix a large tablespoonful of flour with three-quarters of a pint of stock, pour it into the saucepan, and let it boil. Then add any flavouring you may choose, such as catsup, sauce, anchovy, lemon-peel and juice, nutmeg, etc. Strain the gravy, warm the meat, and serve with fried or toasted sippets of bread. It is far better to make a broth with vegetables only, than to use water, and any scrap of meat is better than none.

303. **Rissoles.**—Roll very thin some dripping or butter pastry, and cut it into rounds the size of a teacup. Mince some meat, season it, and add a little broth to moisten it. Wet the edges of the rounds, put a little mince into each, and fold them over. Cover with egg and breadcrumb, and fry in a saucepan. Garnish with fried parsley, and serve hot.

304. **Roman Pudding.**—Any cold meat chopped fine, a little ham or a sausage, and a seasoning of salt and pepper, to which may be added some breadcrumbs. Put some Naples maccaroni into cold water, let it boil one minute, and strain the water off. Grease a pudding basin, cut the maccaroni into inch lengths, and line the basin, so that only the ends of the cut tubes are on the outside. Fill it with the meat pressed down, cover with greased paper, and steam one and a half hour. It should turn out in a shape, and have brown gravy poured round. It can be made by lining the basin with uncut maccaroni, but it does not look so well in that case.

CHAPTER IX.

FISH.

305. **Fish as a Food.**—Fish is less nourishing, less stimulating, and often more digestible than meat. Salmon and salmon-trout are red-fleshed, and may be considered with other red meat.

Speaking from the point of view of its food value, fish is of two kinds. The flesh of some is oily or fat, while the whole of the oil in others is stored in the liver. Oily fish are more nourishing, such as the eel, mackerel, herring, pilchard, and sprat; but they are not so easy of digestion as the whiting, haddock, sole, plaice, flounder, or turbot. Whiting is the fish to be chosen for an invalid, and it should be boiled rather than fried. Cod is not one of the oily fish, nor is it digestible, probably because the flesh is dense and hard. Cod-liver oil is well known as a food; it is the most digestible of all fats.

306. **To Choose Fish.**—Choosing fish, you must look at the eyes, that they are bright, and not filmy; at the gills, that they are red, and not brown; at the scales, which must be all there and shining, not dull and bruised. The flesh should be firm and elastic. The smell is an unerring guide. Flat fish, if they are stale, have a loose skin, which is very easy to remove; the skin often is blistered, instead of adhering to the fish. Tainted fish should not be used, though laying it in charcoal and water for some hours will often improve it.

307. **To Keep Fish.**—Fish must be kept in a very

cool place, in the summer with ice or on wet stones. If it has not been cleaned by the fishmonger, slit it with a sharp knife, take out the inside, and wash it well, but do not leave it to soak in water, as this destroys the flavour.

Turbot, cod, and other white fish, keep better than salmon, trout, mackerel, and oily fish.

A turbot should be hung up by the tail, not laid flat.

308. Time to Eat Fish.—Fish should be in season, or the flesh is flabby, insipid, and innutritious. Those fish are better that live in cold water. No cod is so good as that caught in the Arctic seas.

Lobsters should be bought alive, and then they are surely fresh. If the shell is crusted with lime, choose another, because that fish is old. Shellfish should be heavy in proportion to their size; the light ones are watery, and the very large ones are old.

All flat fish, such as soles, plaice, flounders, turbot, brill, etc., should be thick in proportion to their size.

309. Price of Fish.—Perhaps no food varies in price so much as fish. It keeps badly, so that each day is dependent for supply on the weather of the day before; and a housekeeper, able to depend upon her judgment, may often get a dish of fish for a few pence that another day she would pay several shillings for. If it is low-priced and plentiful it is cheap food, but if anything like the price of butcher's meat it is only to be considered as a luxury.

310. Baked Fish.—Any fish is more economically cooked when baked than boiled, because it wastes less, and needs no sauce.

Make a stuffing with one tablespoonful of suet, or half the quantity of dripping, two tablespoonfuls of breadcrumbs, salt and pepper to taste, half a teaspoonful of chopped parsley, some sweet herbs and sufficient milk to mix the whole. Half a dozen oysters chopped will improve it. Fill the fish—a haddock, whiting, pike, or any such fish may be used—and sew it with needle and cotton. Brush the fish with egg, cover it with crumbs

and bake in a moderate oven, basting with butter or dripping. Serve hot. When the bone can be pulled out it is done. About twenty to forty minutes.

Fish may be also baked in slices on a tin, covered with breadcrumb and a little grated cheese, with a seasoning of pepper, salt, and shalot or onion. A good plan of cooking coarse or tasteless fish.

311. **Boiled Fish.**—No fish must be boiled fast or the skin will break long before the inside is done.

Salmon must be put into boiling water to set the colour, and must simmer until it is done.

Mackerel have so tender a skin that they should go into tepid water and not be brought to the boil. They will be cooked in seven to ten minutes. Serve with parsley, gooseberry, sorrel, or other acid sauce.

All other fish should be put into hot water, but not boiling. The flesh will be firmer if a large handful of salt be added to the water, but then the liquor cannot be used. Always put a couple of tablespoonfuls of vinegar into the water, enough to make it decidedly acid, because the acid sets the albumen in the fish before it boils and so keeps the juice in. Rubbing a flat fish with lemon or vinegar keeps it white for the same reason.

When the fin-bones readily part from the flesh the fish is cooked.

Cod is improved by being laid in salt a few hours before it is cooked, because the flesh is then firmer. Serve cod with melted butter, or oyster sauce. Boiled fish should be dished on a napkin, and garnished with cut lemon, parsley, horseradish, etc.

As soon as fish is cooked take it out of the water. If it has to be kept hot rest the strainer on the top of the kettle, cover it with a cloth, and draw it to the side of the fire.

Throw a lobster into a large pan of fast-boiling water with salt, and keep boiling for fifteen to thirty-five minutes according to size. Too long boiling spoils the flavour and makes the flesh tough.

312. **Fish Cakes.**—Mash some potatoes through a

wire sieve, or with a spoon, and add to them their own weight of cold cooked fish without bone. A tin of salmon or lobster may be used. Hot potatoes are better than cold. To each pound of fish add one ounce of butter, or fresh dripping, salt, and cayenne to taste, half a teaspoonful of anchovy sauce, a little lemon-juice, or vinegar, and either one egg, or sufficient cold milk to bind the whole. Then flour a knife, the board, and your hands, and shape into small cakes, round, flat, and about one and a half inches thick. Brush them with egg and roll them in breadcrumbs, or with milk and roll them in flour. Fry in a saucepan of fat and serve hot.

Cold boiled rice may be substituted for potato. The same mixture may be baked on a tin, or in a pie-dish until brown. The more moist they are the better, but the more difficult to shape.

313. **Fish Cutlets.**—Half a tin of salmon or lobster, or a piece of cold boiled salmon, or one moderate-sized lobster.

Cut the fish up not too small, and remove the bones. If there is any coral in the tin, or with the lobster, put it aside.

Melt in a saucepan an ounce of butter, add one ounce of flour and one gill of water, milk, or fish-liquor. Stir this until it boils and thickens. Then add, off the fire, the juice of half a lemon, cayenne, anchovy, the fish, and one or two tablespoonfuls of cream. Last of all add the coral, which serves only to improve the colour and has no taste. If lobster-spawn is used for colouring, it must be rubbed through a sieve with half an ounce of butter ; it is green, and only turns red when added to the hot mixture. Set it aside for several hours to cool.

When cold flour a board, knife, and your hands, and shape into cutlets. They should be smaller and thicker, but should have something like the shape of a mutton-cutlet. Inexperienced cooks will do well not to make them very soft, as they need some practice in shaping. They must be covered on every part with egg and bread-

crumb, and must be fried in a saucepan. Dish them on a paper, garnish with fried parsley, and into each cutlet stick a piece of parsley stalk, or a piece of maccaroni, or the feelers of the lobster cut into lengths.

In shaping be careful not to make them too thin, and not to work any flour in, but only to use just enough to prevent sticking, or they may burst in the fat. There should be no cracks. They must be shaped again after the crumbs are on. There must be a brush, or feathers, to put on the egg, and the crumbs must be finely sifted through a sieve or colander, not made with a bread-grater, and should be put in a sheet of paper, not on a plate.

314. **Fried Fish.**—All fish is better fried in a basket (Paragraph 44), which can be bought of a size and shape sufficient to take in a sole. A fish can also be cut into neat-shaped pieces with the bone, or removed from the bone in fillets. Having washed the fish, dry it on a cloth, and rub with flour to absorb moisture. Then break an egg on a plate, beat it slightly, cover every part of the fish, then roll it in breadcrumbs, and press the crumbs down with your hands.

Or dip each piece of fish in milk, and roll it in flour.

Or dip the fish in a thin batter, made without lumps, of flour and water, or in fritter batter (Paragraph 301).

Prepare all before you fry any. Fish may be fried in a frying-pan; and provided they are dry, it is not necessary to cover them with anything more than a little flour, though it is better to egg and bread-crumb them. To fry a sole there should be enough fat to nearly cover it, and the fat must be thoroughly hot. Turn the fish very carefully when one side is done.

Small, round fish are fried whole. Whitings should have their tails fastened into their mouths with a skewer.

Garnish with fried parsley, and serve on a paper or napkin.

315. **Oyster Kromeskies.**—Cut some very thin slices of fat bacon. Into each slice put two oysters, that

have been scalded in their own liquor, and fasten them with a tiny skewer of wood. Fry in a frying-pan a very pale brown, and serve hot. They are sometimes dipped in batter, and fried in a saucepan, but are not so good.

316. **Broiled Mackerel.**—Split the fish down the back, and remove the inside; wash it, and dry it on a cloth. Broil it for seven or eight minutes, and serve as directed for beefsteak.

317. **Red Mullet.**—This fish is called the "woodcock of the sea," because it is cooked without being drawn. Butter a sheet of writing-paper, sprinkle it with sweet herbs, and parsley, and mushroom. Lay the fish in, and make a parcel of it. Bake in a slow oven ten minutes, and serve in the paper.

318. **To Skin a Sole.**—Soles are generally skinned on the brown, if not on the white, side; but the flavour is finer if the skin is left on.

To skin any fish let it be wet, and wet your hands. Begin at the tail for flat, and the head for round fish. Cut through the skin with a sharp knife, and loosen it with a skewer or fork. Slip in your finger, and run it along each edge from the tail to the head; then grasp the loose skin at the tail in a cloth with your left hand, and, holding it down on the board, tear the skin off. Take care not to tear the flesh also, and keep your right hand thumb on the backbone.

319. **To Fillet Fish.**—They must first be skinned, and a sharp-pointed knife is necessary. Cut straight down the backbone of a sole or plaice; then cut from the head to the tail, keeping the knife as close as possible to the bone, and separating all the flesh to the left of the backbone. Then turn the fish round, and cut off the remaining three fillets. They may be cut into strips and knotted, or divided if too large. It requires a little practice to prevent leaving any of the flesh on the bones. For filleted soles à la maitre d'hotel, roll each fillet with the smooth side inwards, so as to make a little pyramid, and put them in a pie-dish with a piece of

butter, and covered with buttered paper. Bake in a slow oven five or six minutes. When it looks opaque it is done.

Make half a pint of maitre d'hotel sauce with liquor made from the fish-bones, add the gravy from the fish, dish the fillets, and pour the sauce over. It should be thick enough to adhere to the fish, yet not so thick that it cracks before it is cold.

Filleted soles can be fried, and served in many different ways.

320. **Sole au Gratin.**—Chop half a teaspoonful of parsley, half a shalot, or a tiny piece of onion, and two or three mushrooms; add pepper and salt to taste. Butter a flat baking-tin very thickly, sprinkle it with half the mixture, lay in a sole, cover with the rest of the mixture, the juice of half a lemon, and a thick layer of browned breadcrumbs. Pour round a very little stock, to prevent burning, and bake about ten minutes in a moderate oven. Garnish with parsley and cut lemon, and serve hot.

For the sauce boil the skin and trimmings of the fish with one gill of stock and a pinch of gelatine. Reduce to half the quantity, and add a teaspoonful of mushroom catsup, and pour round the fish.

Plaice, skate, or flounders may be served this way, and are much cheaper than soles.

321. **Whitebait.**—This fish must be cooked the day they are caught, and kept in ice in a cool place until they are used. Pick out the fish one by one, and lay them on a cloth, separating the broken ones. Dredge them with flour, turn them into a frying-basket, not too many at a time, and fry them at once. The fat must be very hot, and the fish should be only kept in for a few seconds, and should be a very pale colour when done. Each fish must be separate. Garnish with lemon, and serve with brown bread and butter.

322. **Baked Whiting.**—Clean a small whiting, and fasten its tail in its mouth with a skewer. Put it in a buttered pie-dish, with a wineglassful of sherry, and a

thick sprinkling of sweet herbs. Cover with buttered paper, and bake about ten minutes. Melt one ounce of butter in a stewpan, add one ounce of flour, the gravy from the dish, and enough stock to make half a pint. Boil and thicken, add a little cream, and strain over the fish. Garnish with fresh parsley, and serve at once.

CHAPTER X.

POULTRY AND GAME.

323. **To Choose Poultry.**—This is not always an easy thing even to those who have some experience. Very large fowls should not be preferred, because they are likely to be old.

The legs must be examined, and should be smooth and light-coloured, with short, soft spurs. If the skin is black or looks hard and horny, the fowl is old. The colour of the legs varies with that of the feathers. A fowl with white legs and feathers is better for boiling. A dark fowl is suitable for roasting. The breast should be plump, not merely made to appear so by the poulterer who flattens the bone.

The neck should not be thin.

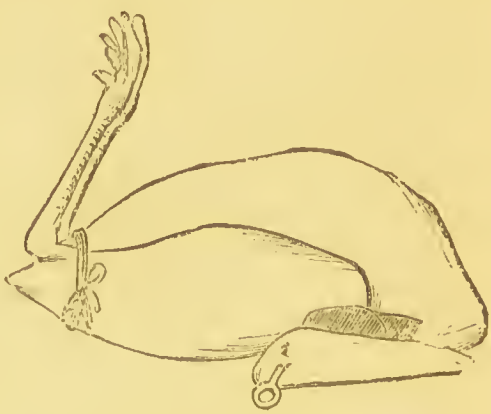
An old fowl must be braised, boiled, or stewed, not roasted. Cooked slowly, and long enough, even a very ancient bird will become palatable.

The feet of geese should be yellow, not red, and a turkey must have smooth black legs and short spurs, and the thighs should not be hairy. Poultry must hang for a few days before cooking, rather longer if they are to be roasted than boiled, but it is not customary to keep them, like game, until they are high.

324. **Birds as Food.**—The flesh of birds is never mixed with fat, or marbled like butcher's meat, and partly on this account it is easier of digestion. Fat of some kind is generally served with it. Rabbit is by no means so digestible as poultry, on account of the closeness of the fibre, and is therefore less suited to the invalid. The flesh on the wings and breast is whiter and

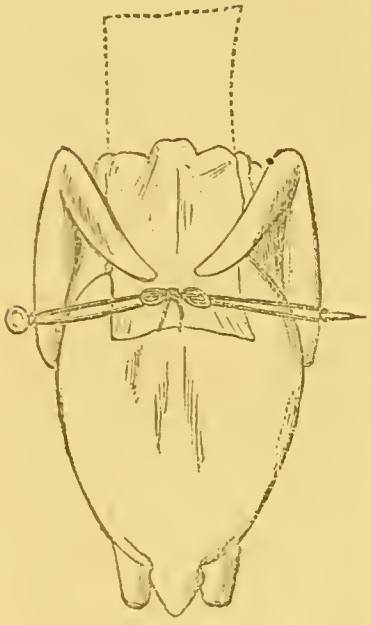
more delicate and digestible than that on the legs and back, which are always the first parts to become tainted, or high. Country-fed fowls are generally preferred. In towns the fowls are fattened in confined spaces, in the dark, on highly artificial food, and the result is a less delicate flesh, and a superabundance of fat. A fowl overfat wastes much in cooking. Game eaten in an advanced state of decomposition, is not proved to be hurtful to persons accustomed to its use, though it has caused serious illness in those unaccustomed to eat it. Cooking stops the actual putrefaction for the time; half roasting is often resorted to as a means of keeping birds a few days longer than would otherwise be practicable. General rules for keeping and cooking, are the same as for meat.

325. **How to Truss a Fowl.**—Having plucked the fowl, make a slit along the back of the neck, and cut off the neck close to the body; cut off the skin of the neck near to the head, so as to leave a piece to turn back. Draw out the crop and windpipe. Make a small hole at the other end of the fowl, only just large enough to insert your fingers and remove the inside. Many cooks make a hole large enough to put in the whole hand, and so spoil the appearance of the bird. Wipe the inside with a damp cloth. Light a large piece of paper and singe off the remains of the feathers. If you wash the fowl, dry it on a cloth carefully, especially if it is to roast. If a fowl is stuffed, the stuffing is put under the flap of skin that covers the merrythought, and is sufficiently secure when the flap of skin is turned back under the wings. Next,



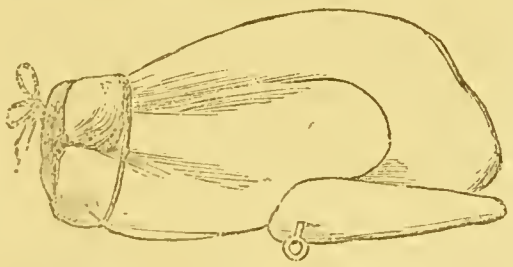
FOWL TRUSSED FOR ROASTING.

if the fowl is to be roasted, dip the legs in boiling water and skin them ; cut off the toes at the first joint, and cut across the sinew that runs along the joint between the leg and thigh. This is to prevent the legs drawing up with the heat. Take the gall out of the liver, and the stones from the gizzard ; wash them both. Cut a slit in the loose skin of the wing, and put one through on each side. Turn back the skin of the neck, and fold the wings over the backbone. Then with the finger and thumb of your right hand, press the first joints of the thighs firmly to the side, keeping the breast as round as possible. Take a trussing needle threaded with string or a skewer, and run it through the first joint of the wings, the thighs, and the body, bringing it out on the opposite side. Tie the string behind. Then take a piece of string and tie it round the joints of the legs and the tail, securing it to the first string, or it may slip off.



BACK OF FOWL, SHOWING HOW TO PLACE THE SKEWER.

A boiled fowl has its legs cut off at the joint of the thigh. The gizzard and liver may be boiled separately and used as a garnish, but not put in the wings. Put



FOWL TRUSSED FOR BOILING.

your fingers inside the fowl and loosen the skin round the thighs, until the bones can be drawn inside the body out of sight. A little care must be taken, or the skin will split. The wings are trussed as for roasting. A piece of string should be twisted round the ends of the legs, the tail turned in, and the whole tied round, so as to leave no opening. A badly-trussed fowl does not lie even on the dish, but turns up to one side. This happens when the skewer is put in unevenly.

326. **How to Bone a Fowl.**—After having cut off the legs at the first joint and drawn the sinews, the easiest way is to slit it up the back, and turning back the skin, to take out first the back and breastbone, afterwards the bones of the limbs one after another. The place of the bones must be taken by forcemeat or sausage-meat, and the back sewed up with a needle and cotton. This plan is quite as good as the other, since the back does not show. The fowl is not to be drawn first.

Or, having drawn the fowl, begin at the neck, take out first the merrythought, then the side bones, and each joint of the wing as you come to it. The last joint of the wing is often left in. Care is necessary to avoid cutting through the skin. The flesh has to be separated from the bone with a small sharp knife, the legs and wings turned inside out like a stocking, as one advances. It is not a hard matter, but requires time and care. An old fowl may well be used.

The inside of the fowl must be refilled with the liver, sausage-meat, tongue, forcemeat, and slices of ham, and it should have the shape of a fowl when done. Braise it with good stock for two and-a-half hours, and prick it with a fork or it will burst. It may be served hot or cold, but must be carefully cooled. Cold, it should be glazed and garnished with aspic jelly. Hot, it must be served with a rich brown gravy poured over, and a garnish of egg, liver, and chopped parsley.

327. **To Boil a Fowl.**—Tie it in a buttered paper, and put it breast downwards in boiling water or in the stockpot. Boil very gently from half to three-quarters

of an hour for a small fowl; longer, if it is large or old. Take the paper off, remove the string and skewers, and cover with white sauce. The liver boiled separately may be rubbed through a sieve as a garnish. More often hard-boiled eggs are used. Round the dish any green vegetables, fried bacon, etc., may be laid.

328. **Braised Fowl.**—Truss as for boiling, and put inside it a piece of butter, a blade of mace, and a very small onion or shalot. Braise according to directions. If you do not lard it, wrap a piece of bacon round the breast. When it is tender brown it before the fire, and serve with brown gravy, or tomato-sauce poured round.

329. **Broiled Fowl.**—A small fowl must be split in two down the back, a large one cut in quarters. A very large fowl must be half-roasted, or it will be overdone outside before it is cooked inside. Cold fowl may be broiled also. With a brush or feather oil each piece, then cook it over or before the fire about fifteen minutes.

330. **Chicken Croquettes.**—Take about half a cold fowl and cut it in small pieces with a slice of lean ham, or bacon, and one or two mushrooms, or truffles, if they are at hand. Melt one ounce of butter in a stewpan, add about one ounce of flour and one gill of milk, or stock, or water. Stir till it thickens and boils, then add the meat, the juice of half a lemon, and one or two tablespoonfuls of cream. If it is too moist, it is not very easy to shape; if it is too dry, it does not taste well. Spread the mixture on a plate to cool. Flour a knife and a board, and shape it in balls or like a cork. Carefully cover each with egg and breadcrumb, and fry in a saucepan. Any cold rabbit, game, or veal, may be used as well as chicken. The croquettes can be served dry, garnished with fried parsley, or they can have a good white sauce poured round and any green vegetables as a garnish in the centre. They must be hot.

331. **Chicken Rissoles.**—Make as above, using half the flour. Roll a piece of pastry very thin and cut it into rounds the size of a teacup. Put some of the mixture into each and fold the pastry in half, wetting the

edges to make them stick. Cover with egg and bread-crumb, or crushed vermicelli, and fry in a saucepan. Serve hot and dry.

332. Roast Chicken.—Put the chicken close to the fire for the first ten minutes. Baste it well with butter or dripping, and roast it from three-quarters of an hour to an hour, according to size. It is a good plan to wrap a slice of bacon round the breast so that the skin may not be dried. Remove this ten minutes before serving, and baste the breast well before a hot fire. Some cooks flour it to give it a frothy appearance. It may be stuffed with sausage or forcemeat. Sausages, or bacon, should be served with it, and gravy in a tureen.

333. Ducks, to Prepare.—The feet must be scalded and skinned and turned back over the thighs, the head cut off, and the wings at the first joint. Stuff the body of the bird with sage and onions, if liked, as for pork. Roast it from thirty-five minutes to one hour, according to size.

Wild duck is not to be stuffed, and takes less cooking, from twenty-five to thirty-five minutes, as it is served rather undone. Brown gravy, flavoured with lemon, or Seville orange-juice, as well as a whole lemon and cayenne, should be sent to table with it.

334. Goose, to Dress.—Stuff it like a duck. Cut off the feet and pinions. Roast from one and a quarter to two hours. Serve with gravy in a tureen and apple-sauce.

335. Boiled Turkey.—Truss it as directed for boiled fowl. Put the stuffing in the breast, not in the body. Wrap it in a cloth and boil it like a fowl, allowing one and a half hours, or more if it is large or old. Pour over it a little sauce, and serve the same rather thinner in a tureen. Oyster, parsley, mushroom, or plain white sauce may be used. It is generally stuffed with sausage-meat, or with veal stuffing, sometimes with oysters or chestnuts.

Take off the husks of the chestnuts and scald them in boiling water to loosen the inner skin. Put them into a

stewpan with a little milk, and stew them till they are tender. Add salt and pepper to taste, a small piece of butter and the yolk of an egg. It must be just moist enough to be shaped into a ball.

336. **Roast Turkey.**—Truss as for roast fowl, cutting the feet off. Wrap a slice of bacon, or buttered paper, round, and stuff as directed for boiling. Roast from one and a half to two and a half hours. Serve with brown gravy and bread sauce.

337. **Boiled Rabbit.**—Choose one with smooth, sharp claws and thin ears. Skin it, remove the inside, and wash it well. Fasten the head down with a skewer, turn the legs forward and the shoulders back, and fasten them to the sides. Put it in boiling water, and simmer from half to three-quarters of an hour. Take out the skewers, put it on a dish, and cover it with parsley, onion, or mushroom sauce. Garnish with fried bacon.

338. **Fried Rabbit.**—Cut it in joints, and lay them in water for a short time; then wipe them dry, and cover each piece with egg and breadcrumbs. A little chopped parsley and lemon-peel may be mixed with the breadcrumbs. Fry a quarter of a pound of fat bacon in a frying-pan, then fry the rabbit over a moderate fire, adding more fat if there is not enough. When it is cooked (in about twelve minutes), put it aside on a hot dish, mix a dessertspoonful of flour with half a pint of water or stock, pour this into the pan, add pepper and salt, give it one boil, and strain into the dish. Put the rabbit in the middle, and the bacon round.

339. **Roast Rabbit.**—Truss as for boiling, but with the head skewered straight between the shoulders. Fill the rabbit with this stuffing, and sew it up with a needle and cotton. Half a teacupful of breadcrumbs, the same of chopped suet, a teaspoonful of parsley, half a teaspoonful of herbs, the rind of half a lemon, very thin, cayenne, salt, one egg or a little milk, and the rabbit's liver, minced fine.

Roast or bake about half to three-quarters of an hour, baste it well, and serve with brown gravy.

340. **Hare, to Choose, etc.**—Tear down the ear from the tip, to see if it is still young and tender; and tear it yourself, not merely stand by while the poulterer does it. The claws must be smooth and bright. Let it hang with the skin on, without removing the inside. After skinning, it must be soaked in water to remove the blood, and then wiped dry. Prepare and truss like a rabbit for roasting; the liver must be added to the stuffing only if it is fresh enough. Serve with brown gravy and red currant jelly, or jelly and wine sauce.

341. **Jugged Hare.**—A fresh hare is better, but the remains of a roast hare may be used. Cut it in joints, and make some forcemeat balls as for rabbit. Flour the hare, and fry it very lightly with the forcemeat. Cut one pound of beef into small pieces, and flour them. Arrange them and the hare in layers in an earthen jar, together with two small onions stuck with cloves, two blades of mace, salt, peppercorns, and the rind of a lemon. Pour over all half a pint of red wine, or wine and stock mixed, or vinegar and water. Tie some brown paper over the jar, and bake in a slow oven about four or five hours. Serve with a garnish of cut lemon and currant jelly. This is a good way of cooking an old hare. A rabbit may be served in the same way.

342. **Partridge.**—Truss as for roast fowl. The head is sometimes left on; and if so, it should be tucked under one wing, and fastened with a skewer. If they are stuffed at all, it must be with fine breadcrumbs, butter, pepper, and salt. Wrap a slice of bacon round, and roast twenty to thirty minutes. Serve on a hot dish, with a few breadcrumbs fried in butter, and brown gravy and bread sauce in tureens. A young bird is easily known by its plumage.

343. **Pheasant.**—Truss and roast like a partridge, allowing twenty-five to fifty minutes. Pour a little gravy round, and serve the rest in a tureen. The cock is considered better than a hen pheasant. The young birds have short, soft spurs, and less brilliant plumage.

344. **Snipe.**—This bird should not be drawn.

Skin the head, and put it under the wing, and truss the bird with the feet turned back on the thighs. Place a piece of toast in the dripping-pan to catch the trail, and serve with the toast under the bird, and a little gravy round. Roast about fifteen minutes; woodcocks rather longer.

345. **Game Cutlets.**—These may be made like chicken croquettes, without the ham, and with cayenne to taste. Seville orange may be used instead of lemon. Shape them like lobster cutlets, and serve hot.

Or cut a pheasant (uncooked by preference) into neat pieces, and remove most of the bones. Egg and bread-crumb them, and broil or fry them over a good fire. Pile them high on a dish, squeeze over the juice of a lemon, and pour round a gravy made of the bones and trimmings.

346. **Salmi of Game.**—Cut any cold game into neat joints, and put them on one side. Pound in a mortar the head, back, and any bones not fit to send to table. Put these in a saucepan with a pint of cold water, salt and cayenne to taste, a shalot, a large bunch of sweet herbs, parsley, a slice of lean ham, and the thinly pared rind of half a lemon. Let this boil for two hours. Melt in a saucepan two ounces of fresh butter, add one and a half ounces of flour, and stir smooth; then add the stock, and a wineglassful of red wine. As soon as it boils, take it off the fire, add the game, and the juice of half a lemon. Do not let it boil again. Serve hot, garnished with croutons of fried bread and slices of lemon.

Hare may be served in this way, and currant jelly should be handed with it.

CHAPTER XI.

SWEET PUDDINGS.

It is difficult to give any general rules that shall apply to such a heterogeneous collection of recipes as naturally falls under the head of Sweet Puddings.

347. **Boiled Puddings in Cloths.**—To boil puddings in a cloth the following rules apply: Always put them in boiling water, and boil them fast all the time they are cooking. Scald the cloth in boiling water, and flour it, or the pudding will stick to it. Wash the cloth without soap or soda, and hang it in the air to dry, instead of leaving it rolled up until it is wanted again. Cloths readily acquire a musty flavour, which they as readily pass on to the next pudding they come in contact with. A suet pudding can hardly be boiled too long, and is often boiled too little. It will keep for a long time if it is not taken out of the cloth. The cloth must be tied tightly, but not too close to the pudding, which must have room to swell, especially if it has baking-powder in it. A pudding boiled in a cloth is apt to stick to the saucepan; to prevent this, put a plate upside down at the bottom. When a pudding is cooked, let it stand a few minutes before turning it out of the basin, or dip it in cold water; it will be less likely to break. Most puddings are better when steamed, since there is no possibility of the water getting in. They take rather longer to cook, but are no more trouble.

348. **Suet Pudding.**—To one pound of flour allow a quarter to half a pound of suet chopped very fine, half a teaspoonful of baking powder, and a pinch of

salt. Mix into a paste with cold water or milk. May be made into balls, and boiled as dumplings, without a cloth, twenty minutes. More often tied in a floured cloth, and boiled one and a half hours. Sometimes baked. It takes less time to cook and is lighter if half the flour is replaced by an equal weight of breadcrumbs.

349. **Christmas Pudding.**—Take three pounds of raisins, two pounds of suet, half a pound of candied peel, half a pound of breadcrumbs, a teacupful of flour, half a pound of sugar, half a packet of spice, rind and juice of one lemon, half a teacupful of milk, ten eggs, and a little salt. Mix all together, and stir it well. Butter a mould or basin, put in the pudding, cover with buttered paper, tie a cloth over, and boil ten hours. One pound of currants may be used instead of all raisins; if approved, a wineglassful of brandy may be added.

350. **Currant Pudding.**—Make as directed for suet pudding, adding half a pound of currants, two ounces of peel, a quarter of a pound of sugar, spice, and one egg. Boil three hours.

351. **Gingerbread Pudding.**—Take one pound of flour, a quarter of a pound of suet or dripping, half an ounce of ginger, a quarter of a pound of brown sugar, one teaspoonful of baking-powder, salt. Mix all together. Warm a quarter of a pound of treacle, with a small teacupful of milk, and stir all together. Boil in a basin or cloth for two hours, or bake one and a quarter hours. Sift sugar over, and serve hot.

352. **Marmalade Pudding.**—Into the ingredients for suet pudding stir two large tablespoonsful of marmalade, and a little brown sugar. Boil one and a half hours, and serve with sugar sifted over, and a marmalade sauce (see Sauces) poured round.

353. **Lemon Pudding.**—Make as the above, substituting the rind and juice of a lemon for the marmalade, and serving with lemon sauce. Almost any flavouring can be added to suet pudding in the same way.

354. **Fruit Pudding.**—Make half a pound of suet or butter paste. Butter a basin, and line with paste half

an inch thick. Fill with fresh fruit, and put the sugar in the middle rather than near the crust. Cover the top with a round of paste, wet the edges to make it stick, put on the cloth, and boil two hours. No sauce is needed.

355. **Norfolk Dumplings.**—Take yeast dough, made by any of the recipes for bread, shape into balls, without cracks, drop into boiling water and boil fifteen to twenty minutes. They can be steamed in a potato steamer. Serve as soon as they are cooked, because they become heavy if overdone. Send meat gravy to table with them. They can be made with baking-powder bread, but the yeast dough is the proper thing to use. If left till cold, they should be toasted, and served like muffins.

356. **Hard Dumplings.**—Make a rather firm paste with flour, cold water, and a little salt. Shape into balls and boil twenty minutes without a cloth.

357. **Roll Pudding.**—Make one pound of suet, or butter paste, and roll it half an inch thick, and square, or oblong. Spread it with jam, or with treacle and ginger, or with sliced apples and sugar, but leave an inch all round dry. Wet the edges, roll it up and pinch the ends together firmly. Then lay it on a cloth with a corner in the middle of the pudding. Roll it to the middle, fold over the ends like an envelope and tie the remaining corner with string. Boil two hours. The cloth should be a good size.

358. **Bread Puddings.**—Soak half a pound of bread all night in cold water. It does not matter how stale the pieces are, but they must not be burnt. Squeeze all the water out, add one gill of cold milk, two eggs, currants, raisins, spice, peel, and sugar to taste. Boil or steam one and a half hours and serve with sweet melted butter, or wine sauce. The pudding can be baked, and the eggs and milk may then be left out.

359. **Brown Bread Pudding.**—Five ounces of brown bread crumbs, three ounces of sugar, the rind and juice of a lemon, the yolks of four eggs, and nearly half a pint of new milk. Whip the whites of two eggs, and

stir them lightly to the other ingredients, add also one pound of fresh cherries, stoned. Steam one and a half hours. Serve with fruit-sauce made of cherries. (Paragraph 428.)

360. Batter Pudding.—Put six ounces of flour in a basin, with a pinch of salt. Break in, one by one, three eggs, and stir them well, so that there are no lumps. Then stir in one pint of milk. The more it is beaten the better it will be. Let it stand an hour or two before it is cooked. Fill a buttered basin about half full, if it is to be steamed; fill it quite full and tie a cloth over, if it is to be boiled. Cook one and a half hours. Serve hot with sauce, or preserve.

361. Black Cap Pudding.—Make, as above, and add, after it is in the basin, a quarter of a pound of currants. They will all appear on the top of the pudding.

362. Cabinet Pudding.—Butter a mould and ornament it with dried cherries and angelica, or citron-peel and raisins. Cut some stale sponge-cake in thin slices and line the mould, fill the centre with alternate layers of cake, macaroons and ratafias. Beat the yolks of four eggs and the whites of two, add a little sugar, one pint of milk and a little essence of lemon, or vanilla. Pour it into the mould, cover with buttered paper, and steam one hour. The water must not boil fast.

363. Baked Puddings.—To make these the pie-dish must first be greased with butter or dripping. Often it is lined, or rather bordered, with paste, which should not be put all over the bottom of the dish, but only round the sides and edges. A suet, or similar, pudding should be turned out of the dish and have sifted sugar over it. A pie-dish that is sent to table must have a napkin folded round it or it must be set on a paper, or napkin, to prevent it slipping on the dish.

364. Amber Pudding.—Line a pie-dish with puff-paste. Take one pound of apples, peeled and sliced, or an equal quantity of tinned apples, gooseberries, or rhubarb, add two ounces of butter and sugar to taste.

Stew them and rub them through a sieve. Stir in the yolks of three eggs, pour it into the pie-dish, and bake it lightly. Meanwhile whip the whites to a froth, and add sugar and essence of lemon. Put this on the pudding, and ornament it with citron-peel and cherries, or with some of the egg, coloured with cochineal. Bake again, just enough to set it, and serve hot or cold.

365. **Apple Dumplings.**—Pare some large apples all about the same size, cut out the core with a pocket knife and put into each one clove and some sugar. Cut some rounds of paste rather larger than the apples and cover them, leaving no cracks, and getting the paste, as far as possible, of even thickness. Wet the top of each, sprinkle sugar over and bake in a moderate oven.

366. **Apple Charlotte.**—Butter a mould, melt some butter in a saucepan and cut some thin stale bread into small fingers or rounds. Dip the bread into the butter, and line the mould so that there are no holes and each piece overlaps the other like the scales of a fish. Stew some apples with sugar and without water, fill the mould, put a round of bread on the top, cover with a plate, and bake in a good oven until the bread is browned. Turn it out and serve hot.

367. **Arrowroot Pudding.**—Mix one ounce of arrowroot in a basin with a little cold milk. Boil one pint of milk with a strip of lemon-peel and a little sugar and pour it on the arrowroot. Stir in the yolks of two eggs and beat it well, then add the whites beaten to a froth and stir very lightly. Bake in a good oven ten to fifteen minutes and serve at once, as it falls.

368. **Bakewell Pudding.**—Line a pie-dish with paste, and spread a thick layer of raspberry jam at the bottom. Take equal weights of butter, white sugar, breadcrumbs, and eggs. Warm the butter, add the other ingredients, with the rind and juice of a lemon, using the yolks of the eggs only. Pour over the jam, and bake three-quarters of an hour.

369. **Bread and Butter Puddings.**—Cut thin slices of stale bread and butter them. Butter a pie-dish,

and put the bread in alternate layers, with jam, currants, sugar and peel, stewed apples, marmalade, or any combination of these that fancy may dictate. Pour a custard over the top and bake in a slow oven. Custard-powder answers very well.

370. **Gateau of Fruit.**—Line a Yorkshire pudding tin with pastry made of bread-dough (Paragraph 152). Cover it with fruit and arrange evenly, so that there are no spaces. Boil a little water with a small piece of butter and sugar to taste, pour it over the fruit and bake in a moderate oven. When it is cold take it out of the tin.

371. **Friar's Omelet.**—Butter a pie-dish thickly, and line it with breadcrumbs. Stew two pounds of apples and rub them through a sieve. Add sugar to taste, the yolks of four eggs and the whites of two, and a little sherry and lemon-juice. Pour into the dish and bake until the crumbs are brown. Turn it out and strew sugar over.

372. **Maccaroni Pudding.**—The maccaroni must not be washed. Put it into boiling water, or milk, or stock, and let it boil fast until it is tender, which will be at the end of about half an hour. For a pudding boil it in milk, with sugar and flavouring to taste. Put the maccaroni in a dish, mix the milk with one or two eggs, pour it over, grate some nutmeg and put some small pieces of butter on the top, and bake in a slow oven. Serve hot or cold.

If maccaroni is put into cold water and simmered, it is sure to be tough, whatever it is for.

373. **Marlborough Pudding.**—Line a dish with paste, the bottom as well as the sides. Slice in two ounces each of orange, lemon, and citron peel. Dissolve four ounces of butter in a stewpan, add four ounces of white sugar, and the yolks of three eggs. Stir until it thickens, pour it over the pudding and bake three-quarters of an hour. Serve cold in the dish.

374. **Mince Pies.**—Take two pounds of kidney-suet, and two pounds of raisins, chopped very fine, one pound of currants, six ounces of loaf sugar, half a pound of chopped apples, quarter of an ounce of pounded

mace and cloves, quarter of an ounce of ground cinnamon, the juice and peel of one and a half lemons, quarter of a pound of citron-peel, quarter of a pound of orange and lemon-peel, a little salt, three quarters of a pound of macaroons soaked in sherry. Mix the whole with half a bottle of brandy and keep it in covered jars in a dry place.

Line some tins with puff or flaky paste, fill them with mincemeat, adding a little more brandy if it seems dry, and cover the top with paste, wetting the edges to make them stick. Glaze the top, not the edges, with water and sifted sugar, or with egg. Bake in a good oven.

375. **Railway Puddings.**—Butter some cups and ornament the bottom with strips of peel and cherries. Mix one teacupful of flour, one of white sugar, one teaspoonful of baking powder, two eggs, and a very little cold milk. Pour it quickly into the cups and bake ten to fifteen minutes. Serve hot, with sweet sauce of any kind poured round.

376. **Rice Pudding.**—Wash some rice, put two ounces at the bottom of a pie-dish, with one ounce of sugar and one ounce of suet. Pour over two pints of milk and bake in a slow oven.

377. **Sago Pudding.**—Boil two ounces in a quart of milk until it is tender. Stir in one egg and sugar to taste. Pour into a pie-dish, grate some nutmeg over, and put a little suet or dripping on the top. Bake in a slow oven.

378. **Treacle Tartlet.**—Line a shallow dish with paste and half fill it with breadcrumbs. Add a little grated ginger, and lemon or orange-peel. Pour over enough golden syrup to cover the crumbs, and bake in a slow oven.

379. **Wafer Puddings.**—Take two eggs, half their weight in butter, half in flour, half a pint of milk, one dessertspoonful of sugar. Cream the butter, add the other ingredients and beat well. Butter some saucers and ornament them with peel, pour the pudding in and bake twenty minutes. Serve with hot jam between.

380. **Fried Puddings.**—Those puddings that are fried in a saucepan may be put into fat that has already served for savoury dishes, unless it is very brown,

or has been repeatedly used for fish. Dripping, butter, or lard may be used in a frying-pan.

381. **Fritters.**—These may be made of bread or stale cake, soaked in milk or wine, or of fruit, or of the leaves of borage. Three ounces of flour, one dessert-spoonful of oil, a pinch of salt, one gill of warm water, and the white of one egg whipped to a froth. A little baking-powder may replace the egg for economy's sake, and oiled butter the oil. Mix these ingredients, dip into it whatever you are using for the fritters, drop them into fat without a basket, and fry a pale brown. Serve with sifted sugar over.

382. **Golden Crusts.**—Cut some stale bread into slices half an inch thick. Break an egg on a plate, add a little milk, soak the bread in it, and fry in a frying-pan with dripping or butter. Serve with brown sugar sifted over, and a little grated nutmeg or cinnamon. The fritters can also be cut all the same size and shape, and served two together with hot jam between.

383. **Pancakes.**—Make a batter as for batter pudding, using four ounces of flour, one egg, and half a pint of milk. Melt a small piece of lard in a pan, pour in two or three tablespoonsful of the batter, and cook it over a moderate fire. When it is pale brown, turn it with a knife, or toss it in the pan, and cook the other side. Turn it out on paper, sprinkle with sugar and lemon, roll it up, and begin again with another piece of lard. Some people like them crisp, not rolled. For this a hotter fire, more lard to begin with, and less batter for each pancake, cooked rather longer.

384. **Rice Croquettes.**—Boil a quarter of a pound of rice in milk with a piece of lemon-peel until it is quite dry and soft. Stir in one egg, sugar to taste, and let it cool. Flour your hands, shape it into balls, egg and breadcrumb them, and fry in a saucepan. Sift sugar over, and serve hot. Hominy may be cooked the same way, but it needs soaking and longer cooking.

385. **Soufflées.**—These may be either steamed or baked, not boiled. Steamed, they do not fall so soon

after they are cooked, and they can be eaten cold; but baked and cold, they are tough and heavy. They need to be cooked just the right time, as directly they are done, whether they are served or left on the fire, they begin to fall. They must be served in the tin if they are baked, and turned out of the tin if they are steamed. Steamed soufflée should have a sauce poured round, baked soufflée none. A double piece of buttered paper must be tied outside the tin, to prevent the mixture from falling over the sides. This must be taken off, and replaced by a folded cloth before it is sent to table. Soufflée cases of electro-plate, etc., are also sold, to slip the tin into; they must be warmed. The tin must be well buttered, should not have been washed or baked, and for a steamed soufflée the bottom must be lined with buttered paper, cut exactly to fit; for if the pudding sticks to the bottom, as it is likely to do, it will be spoilt before you can get it out of the tin. The paper comes out with the pudding, and must be peeled off. The mixture of flour, etc. (called a panada), is made first, and boiled, then the yolks of the eggs are added, and beaten thoroughly well into the mixture with a wooden spoon. This is essential to the lightness of the soufflée. Last of all, the whites must be whipped to a very stiff froth, and stirred in lightly, *immediately* after which the pudding must be cooked. Always take one more white than yolk. Get the tin ready before you make the soufflée.

386. **Steamed Soufflee Pudding.**—Melt in a saucepan one ounce of butter, add one ounce of flour, one gill of cold milk, boil and thicken, and let there be no lumps. To this panada add a dessertspoonful of white sugar, and (off the fire) the yolks of three eggs and the whites of four, with half a teaspoonful of essence of lemon or vanilla. Steam about thirty minutes; it feels firm on the top when it is done. It should be firm throughout, not liquid in the middle. Pour round lemon sauce, fruit sauce, etc. To bake it would take ten minutes less, and the oven must be very hot. (See also cheese and potato soufflées.)

CHAPTER XII.

JELLIES, CREAMS, ETC.

387. **Jellies.**—These are more often made of prepared gelatine than calf's foot.

Isinglass is a finer sort of gelatine, prepared from the swimming bladder of a fish. Gelatine may be prepared from bones, the skins of animals, and the horns. For all ordinary purposes gelatine is the best and cheapest to use.

There is, however, rather more nourishment in calf's-foot jelly, and therefore it is preferred for the sick room. Not that any jelly is a nourishing food, but it is very digestible and palatable, and forms a good vehicle for wine.

Jelly made from gelatine is less troublesome, because it needs less clearing. The amount to be used is stated on each packet, and varies with each maker. In hot weather rather more should be taken than is directed. Gelatine jelly sets sooner than calf's-foot jelly, and is usually firmer.

388. **Jelly Moulds.**—These moulds must not be used for butter puddings. They must be scalded with boiling water, rinsed with cold, and used wet. A border mould is one that has a hole in the centre; it is often used for savoury jelly and filled with salad.

To turn out a jelly, dip it into hot water, but do not let it remain in it, as the jelly will melt.

To mould a jelly in stripes of different colours, or with fruit set in it, takes some hours. Pour a very little jelly into the mould and let it set; then put a few pieces of egg or fruit, and a little more jelly to set again. Repeat this till the mould is full, remembering that the top of the future jelly lies now at the bottom. Sometimes jellies split into layers. That is because the first layer was allowed to become too firm before the next was added; it must be taken at the right moment. Soak gelatine in cold water for several hours before using.

389. **Calf's-foot Jelly.**—Calf's-foot, or cow-heel jelly may be used. The calf's-foot is sold with the skin on, the cow-heel is sometimes skinned and parboiled, sometimes not. It is best to get it unskinned if possible. Cut the foot into as many pieces as there are joints, chop the long bone and remove as much of the fat as possible. Wash it thoroughly, and put it on the fire, with cold water enough to cover it; let it boil, then throw the water away, and wash the foot again. Put it into a copper or enamelled saucepan, with cold water enough to cover it, and let it stew gently for five or six hours. Skim it from time to time, then strain it into a basin. A calf's-foot should make at least a quart of good stock. The mistake is often made of turning the whole contents of the pan into the basin, so that when cold it is impossible to get the fat off. The bones can be put aside for use in various ways.

Skim off the fat, as directed for Clear Soup (Paragraph 211). Pour the jelly into a clean stewpan, and do not use the sediment at the bottom. So far all jellies are alike. This stock may be made sweet or savoury.

390. **Sweet Jelly.**—To one quart of the stock add the rind and juice of two lemons, three or four cloves, a little nutmeg, sugar to taste, and the whites and shells of two eggs. The shells must be clean, and a few more

shells will do no harm. Whisk it over the fire until it boils, then cease whisking and let it boil to the top of the saucepan. Set it aside in a warm place, undisturbed for fifteen or twenty minutes, then strain it through a jelly-bag or a cloth that has been scalded with boiling water to warm it, and to remove the starch, if there be any, from the last washing, as a very small quantity of starch would spoil the jelly. It will have to be strained twice or more, and must be put through a little at a time. Do not squeeze the bag, but set the jelly near the fire and keep it hot by setting a tin and a kettle of water on the top of the stand in cold weather. A cloth laid in a tin colander makes a good stand, but the tin must not be rusty. A chair upturned answers well if one ties the cloth to the four legs. Clear jelly is rather less nourishing than thick, for the white of egg is all strained out and left on the cloth. Therefore where economy is practised, and where a good appearance is not necessary, it can as well be left thick. The white of egg need not be beaten before it is put into the jelly, but it must be well whisked after, so as to divide it into small pieces. As soon as boiling-point is reached, all the pieces harden and rise to the top, carrying with them any particles that they may meet on their way. When the jelly is still these form the white scum. Therefore jelly must be thoroughly boiled, not merely allowed to simmer. The lemon or vinegar helps also to harden the white of egg. If it is not clear after several times straining, it may be boiled again with another white and shell, and strained through the same filter. It is better to add the wine after straining the jelly, since boiling the wine wastes it, and it needs no clearing. A wineglassful may be added to the above quantities. Half may be coloured red with cochineal, and the mould set in stripes of colour. A little fresh fruit, preserved cherries, etc., should be placed in the mould. The same recipe, with half the egg, may be used for gelatine and water, instead of calf's-foot stock. It is far less troublesome.

391 Aspic Jelly.—Make in same manner as the

foregoing, but in the place of the ingredients there given take one quart of stock, one carrot, one turnip, one stick of celery, one shalot, a bunch of parsley and herbs, three or four cloves, the rind and juice of a lemon, three or four peppercorns, two lumps of sugar, salt, two tablespoonsful of best vinegar and a wineglassful of wine, the whites and shells of two eggs. The vegetables must be washed clean and cut small. The flavour is improved if in the place of one egg, about half a pound of lean beef or veal is added. The meat must be scraped not cut, and every particle of fat or skin removed. If gelatine is used it should be mixed with stock rather than water, but the stock must have no flour or potato in it, for ever so little will spoil a jelly.

392. **Milk Jelly.**—After making calf's-foot jelly, put the remains of the foot into a stewpan, and cover them with milk. Stew several hours, and strain. Flavour with lemon-peel, nutmeg, essence of vanilla, or anything else you may prefer, and sweeten with sugar to taste. It may also be made savoury by flavouring with a small onion, celery, turnip, salt, peppercorns, spice and lemon-peel. The yolk of an egg should be stirred into the hot jelly if it is wished to make it more nourishing. It is suitable for an invalid. Let it settle in a jug before pouring into the mould, as there is always much sediment.

393. **Apricot Cream.** — Dissolve one ounce of Nelson's gelatine in a little milk. Rub one pound of tinned or freshly-stewed apricots through a hair sieve. Whip half a pint of double cream to a stiff froth. Add all together, sweeten to taste, colour with cochineal a pale pink, and pour into a mould. Tinned peaches may be substituted.

394. **Blanc-Mange.**—Take one quart of new milk, or new milk and cream, one ounce of gelatine, sugar and flavouring to taste. Two or three laurel leaves, half an ounce of sweet and bitter almonds blanched and pounded, a teaspoonful of ratafia or other essence, or the rind of a lemon may be used. Soak the gelatine in a little milk, then put all the ingredients into a lined or copper stewpan,

and stir until all the gelatine is dissolved. If cream is used, add it last of all, and do not boil it. Strain it into a jug, and when nearly cold mould it. A little coloured jelly may be put in the bottom of the mould as an ornament.

Blanc-mange is commonly made with cornflour and milk. Blanc-mange powders are sold in packets. They are some preparation of starch, very good, and much cheaper than blanc-mange made with the above recipe. Mix three ounces of cornflour with a little cold milk. Boil one quart of milk with sugar and flavouring, and pour it on the cornflour. Stir so that there are no lumps. Put it again in the saucepan, and stir till it leaves the sides of the saucepan. Pour it into moulds. The yolk of an egg is sometimes added, and makes it rather richer: it is not necessary.

395. **Charlotte Russe.**—Take a clean dry tin, quite straight, and not very deep, and line it with Savoy biscuits standing up side by side. They must fit so tight that they do not fall out when the tin is shaken. Ornament the bottom with dried cherries, angelica, or any other preserved fruit. Make enough custard to fill the mould. Dissolve one ounce of gelatine in a little milk, and add it to each one and a half pints of the custard. When nearly cold fill the mould, but not before, or it will run between the cakes. The jelly must be rather firm. When quite set turn it out. Any cream may be substituted for the custard.

396. **Chocolate Cream.**—Boil one and a quarter pint of new milk, with one dessertspoonful of sugar and half a teaspoonful of essence of vanilla. When boiling, pour it on a small teacupful of cocoa, or chocolate powder. Add the yolks of five eggs and the whites of two, stir till it thickens, but do not let it boil. If it is to turn out of a mould add one ounce of gelatine dissolved in a little milk.

397. **Claret Jelly.**—Take one and a half pint of claret, the rind of half a lemon, grated nutmeg, white sugar to taste. Dissolve one and a quarter ounce of

gelatine in half a pint of water, mix with the other ingredients and simmer a short time over the fire. Strain through muslin and pour into a mould. A little brandy may be added.

398. **Lemon Cream.**—The rind of one lemon and the juice of two, six ounces of lump-sugar and half a pint of water. Stir all over the fire. Just before it boils add it to the whites of four eggs. Put the whole into a jug and stir till it thickens, but do not let it boil or the egg will separate from the other ingredients. A good way of using the whites that are often left from other recipes. Citric acid and essence of lemon may be used in the place of fresh lemons.

399. **Orange Jelly (Thick).**—Grate the rind of two oranges and two lemons, mix with the juice of twelve oranges and two lemons. Boil one pound of sugar in one pint of water. Dissolve two ounces of gelatine in half a pint of water. When cool mix all together, and strain into the moulds.

400. **Vanilla Cream.**—Make one pint of boiled custard. Whip half a pint of cream to a froth. Dissolve one and a quarter ounce of gelatine and a little milk. When cool mix all together, add sugar to taste and a teaspoonful of essence of vanilla, and pour into moulds. Any other essence may be used.

401. **Strawberry Cream.**—Rub a pound of strawberries through a hair-sieve. Whip half a pint of double cream to a froth. Melt half an ounce of gelatine in a little milk. Mix all together, sweeten to taste, and pour it into a mould to set. Raspberries, or raspberry or strawberry jam, may be used instead of fresh strawberries. All creams look better if about half an inch at the bottom of the mould is filled with clear jelly. Let this set and then put in the cream, also nearly set.

CHAPTER XIII.

FRUITS AND PRESERVES.

402. **Fruit.**—Fruits are, in this country, generally considered in the light of luxuries rather than foods. A fruit is the seed of a plant with the surrounding structures. Wheat and peas are fruits, just as much as apples or plums, but the name is used here to denote only such fruits as are popularly accepted as such. They contain too much water to possess any very marked nutritive value, although some have a considerable proportion of sugar, gum, and pectine or vegetable-jelly, nearly akin to starch. All fruits contain vegetable acids and salts, and therefore counteract the ill effects produced by a prolonged use of salted meat. Fruit should be both ripe and fresh. When stale it is apt to undergo fermentive changes in the alimentary canal, occasioning disorders of the stomach and intestines. Although it cannot be asserted that stale fruit, if cooked, is so likely to disagree as when it is uncooked, yet there can be no doubt that, either cooked or raw, it is injurious to health.

403. **To Keep Fresh Fruit.**—Fresh fruits should be kept on wood, not on china, in the dark, in a current of air, not touching each other. The decayed ones should be taken out every few days or they will cause the sound ones to decay.

404. **Dried Fruits.**—Of dried fruits the commonest are currants, sultanas, and raisins—all grapes dried in the sun. Currants are indigestible to many persons, because the skin is of a waxy nature, therefore not easily penetrated by the digestive juices; raisins owe their superior digestibility to the fact that they are often

chopped and generaliy sub-divided by mastication. Raisins should be fresh; the stale have always lumps of crystallized sugar on them. Like all fruit with pips or stones, the fewer they have the better. All dried fruits should be stored in a closed jar or tin and kept in a cool place.

Dried fruits such as apples, peaches, and plums are somewhat different productions. The water is removed by artificial heat, and when the fruit has re-absorbed water it regains its former qualities, and is used as a fresh fruit. Grapes contain much more sugar than any of these fruits, and are more nourishing. A handful of raisins and a slice of bread make a lunch not to be despised. Some recipes for preparing other dried fruits for table will be found under different heads.

405. Apples.—Apples keep so long after being picked that they are in use during the greater part of the year. Of late years they have been imported from America in wooden tubs, and arrive in this country in good preservation. Dried apples are sold, those called Norfolk "beaufins" or "biffins," and Normandy pippins, being dried whole under a weight, while the chips are sliced and dried by heat. Both kinds absorb water readily. The apple chips can be used for all purposes where fresh apples are employed, but they should be first soaked in a little cold water and afterwards stewed in the same. Tinned apples have often an unpleasant flavour, and are neither so good nor so cheap as the chips, but they can oftener be procured, and keep for any length of time. Recipes will be found in the chapter on Puddings for cooking apples in various ways.

406. Apple Jelly.—Peel and quarter two pounds of apples and put them in a stewpan, with a piece of lemon-peel, a little water, and sugar to taste. When they are tender rub them through a sieve. Melt half an ounce of gelatine in enough cold water to cover it, mix all together and pour it into a mould. It will turn out in a shape when cold. Colour with cochineal.

407. Apple Fritters.—Choose large apples, pare

them, and cut them in slices of equal thickness through the core. Cut out the core from the centre of each piece. Fry as directed for meat fritters, sift sugar over, and serve hot.

408. **Stewed Apples.**—Choose hard apples that do not easily break. Peel them and cut out the core with a pocket-knife or cutter. Stew them slowly until tender in water and sugar. A little spinach-green keeps them a good colour. They must not be broken. Place the apples on a dish and fill the centre of each with any red jam; ornament the top with strips of marmalade. Boil the water till it is reduced to a syrup, add two tablespoonsful of red jam, lemon-juice, and cochineal. Strain and pour it round the apples.

409. **Apricots.**—Those that are necessarily thinned out of a good crop may be used for tarts like green gooseberries. The coarser and cheaper kinds of apricots are as good for cooking as the finer sorts used as dessert fruit. For jam or tarts the stones should be broken, and the kernels cooked with the fruit. Both tinned and dried apricots are sold, and can be used with success. Because apricots are rather a scarce fruit and dear, they may be used to advantage with the following recipe:—

Take some large rhubarb, cut it in pieces, stew it without water, and rub it through a fine sieve. Mix some of this juice with the fresh apricots and their stones, not using more than one pound of juice to three pounds of apricots. The rhubarb is scarcely perceptible. For jam take equal weights of fruit and sugar. When it boils skim it well to make it clear, and boil forty-five minutes. The skin is sometimes removed, but is better left on.

Peaches and egg plums may be used in the same way.

410. **Compote of Fresh Fruit.**—Boil one pint of water with three quarters of a pound of sugar for a quarter of an hour and skim it well. Then put in the fruit a few pieces at a time, and simmer it till it is transparent. The fruit should not be broken. Take the fruit out as it is done and put in on a dish, reduce the syrup

to half the quantity and pour it over the fruit. Serve cold. It will not keep more than a few days.

411. **Currant Jelly.**—Pick the fruit from their stalks, and put them over the fire, without water or sugar, until the juice is drawn out. Strain the juice off through a coarse canvas bag, and to each pint of juice add one pound of preserving sugar. Put it into a preserving pan, and stir continually with a wooden spoon, taking off the scum as it rises. After twenty or thirty minutes' boiling, the jelly will make strings or hairs in dropping from the spoon, and a little put on a plate will set at once. Then take it off the fire without delay, and put it into clean dry jars, as if it is cooked longer it will candy. When it is cold, paste paper over the top, and store it in a cool, dry cupboard. The fruit left in the bag may be stewed with a little sugar for puddings, or to serve with rice.

412. **Preserved Damsons.**—Damsons keep better than any other fruit, it is hard to say why. Stewed with sugar and poured into jars, with about half an inch of melted mutton fat poured over them, they will keep some weeks. It is better to tie bladder or brown paper over the top, and not to use large jars, because when once the fat is taken off they will not keep any more. An inch of salad oil is recommended in place of the mutton fat. It remains liquid, and so keeps the air out more completely than the solid fat, which is apt to crack, and let the air in at the edges. Its drawback is, that it is not so easy to remove.

413. **Dates.**—Put them into a jar in the oven with a little water, and a few strips of orange or lemon peel, but no sugar. Let them cook very slowly for several hours. Dates are used also for puddings in the place of raisins. The crushed dates can be bought at a very low price, and are suitable for cooking. They are both wholesome and cheap, and contain so much nourishment that they are a staple food of the Arabs.

414. **Bottled Gooseberries.**—Cut off the tops and stalks, and fill some dry wide-mouthed bottles. Add

some powdered sugar. Put the bottles in a deep stew-pan, with hay between, and fill the pan with salt and water. Set the pan on the fire, and let it boil fast. Fill up the bottles as the fruit sinks down. When the steam is seen coming out of the bottles, and while it is on the fire, put in tight-fitting corks, seal them with wax or resin, and let the bottles remain in the saucepan till they are cold. They must be kept in a dry, cool place, or they will ferment. Success depends upon driving all the air out of the bottles by boiling, and allowing none to enter after. If this be ensured, it matters nothing whether water or sugar, or both, be mixed with the fruit.

415. Jams.—Jam will not keep with less than three-quarters of a pound of sugar to a pound of fruit; it keeps better with one pound of sugar to one pound of fruit. Whether the sugar is brown or white makes no difference to the keeping of the jam, but much to its flavour. It is cheaper to buy sugar for preserving in large quantities.

The fruit must be fresh and sound, with no fermentation commencing in it. If it must be kept, cover it with sugar, and keep it in a cold place on stones or ice. It makes no difference whether the fruit is wet or dry, if it is not fermenting. Many excellent recipes direct that cold water shall be *added* to jam, and jam so made keeps well. The jam must be boiled till the greater part of the water is driven out, and the firmer it is the better it keeps. In the chapter on preserved meats, it was remembered that for fermentation or mould three conditions are necessary, as well as something for the mould to feed on. It must have some moisture, some air, and a certain degree of heat. If jam is kept damp, mould covers it; if too hot, it ferments. But a tin of American fruit kept by its side will neither ferment nor become mouldy, because all air is carefully excluded from it.

It is usual to cover the top of each pot of jam with tissue paper dipped in white of egg or brandy, but this will not keep it good in a damp place, and it will keep

good without it in a cool, dry cupboard. A piece of paper egged or gummed can be stuck over the top, and keeps out both dust and air.

Put the fruit in a stewpan with the sugar, and set it over a slow fire till the sugar is dissolved. Boil it thirty minutes, or more if the fruit needs long cooking, skim it well, put it into dry pots, when it is cold cover and label it. Use a wooden spoon, or a silver one. Jam must not be made in a copper pan unless it is lined throughout with tin, or the jam will be unwholesome.

416. Marmalade.—Take six Seville oranges, six pounds of sugar, two lemons, six pints of cold water.

Slice the oranges very thinly, and take out the pips. Put them into a basin with the water, and let them soak thirty-six hours. Then boil them gently for two hours, add the sugar and boil gently two hours longer, keeping it well skimmed. Put in the juice of the lemon twenty minutes before it is done.

417. Stewed Pears.—Peel and quarter the pears, and put them in water to keep their colour. Put them into a stewpan with water enough to cover them, a glass of red wine, six cloves, and sugar to taste. Stew gently till the pears are soft. Reduce the water to a syrup, colour it with cochineal if necessary, and pour it over the pears. Serve cold. Any unripe or hard pears will do.

418. Gateau of Prunes.—Stone one pound of prunes, break the stones, and blanch the kernels. Stew them in one pint of water with the grated rind of a lemon, and two ounces of sugar. Dissolve one ounce of gelatine in one gill of water, add it to the prunes with the juice of the lemon. Turn it into a border mould. Serve cold with custard or whipped cream in the centre.

419. Rhubarb.—It is hardly necessary to observe that rhubarb is not a fruit, but the leaf-stalk of a plant of the buckwheat tribe. It is generally used in the early spring before fruits are obtainable, but it is better flavoured in the summer. The flavour is better if the stalk is not peeled. Rhubarb readily takes any flavour, and is therefore often mixed with other fruit or flavoured

so as to imitate them. There are several varieties, differing considerably in flavour. For jam, cut the rhubarb in pieces, and add to two pounds, one and a half of sugar, the grated rind of half a lemon, three or four sweet and one bitter almond, chopped small. A little ginger is sometimes added also. Put it over the fire, stir for forty-five minutes after it boils, and then put it away in pots. If the rhubarb is very juicy, it will need a little longer boiling.

420. Sago Jelly.—Take any fresh fruit (currants or raspberries are suitable), and put them in a saucepan with a little water, and sugar to taste. When it boils, sprinkle in a small teacupful of sago, and simmer the whole until the sago looks transparent, and the mixture is thick enough to turn out of a mould when cold. More water can be added if necessary. It can, of course, be coloured with cochineal or spinach-green to improve its appearance before it is put into the mould.

CHAPTER XIV.

SAUCES AND CONDIMENTS.

421. **To make Sauce.**—Sauces should not be made in iron saucepans, nor with an iron spoon. The excellence of most sauces depends upon that of the stock that they are made with, and upon its careful flavouring. Where economy is necessary, vinegar may be substituted for lemon, dripping for butter, water or skim-milk for brown and white stock. Every sauce that has flour in it must be boiled to cook the flour. As a rule, all thickened sauces are best mixed in the same way. Melt the butter, add the flour, and stir it smooth with a wooden spoon. If lumps are left now, no pains will afterwards get them out. Then add the liquid gradually, and still stirring. Turn the back of the spoon towards yourself, and towards the side of the pan, for if you do not, the flour will collect in its hollow, and will not come out.

When once a gravy has boiled you may leave off stirring, but not before. Keep gravies hot by standing them in a saucepan of hot water.

422. **Apple Sauce.**—Peel and stew with a very little water six or eight sour apples, and rub them through a sieve. Add a piece of butter, a very little sugar, and serve at once.

Green gooseberry sauce is made in the same way. The fruit may be stewed in a little white stock, instead of water.

423. **Bread Sauce.**—Rub three ounces of stale bread through a sieve or colander. Put it on the fire

with one pint of cold milk, one small onion, a blade of mace, and a little white pepper and salt. Let it boil five minutes, take out the onion and mace, add a little cream and serve at once.

424. Brown Gravy.—This sauce may be browned with onions, which must be cut in rings and dried, and then fried in a little butter or dripping, until they have taken a very dark colour. Some of the brown onion skin should be used; for it has in it much colouring matter, and no unpleasant flavour. The pieces of onion should be strained out after the gravy is made.

If the flavour of onion is objectionable, then flour can be used—what is called a *roux*. Melt a little butter in a saucepan, and add some flour, enough to take up all the butter. Stir it over a moderate fire, until the flour begins to brown, not to burn. It can be made as dark or as pale a colour as is wished before adding the stock or water, or whatever the gravy is to be made of, when it will, of course, brown no more.

Or sauces are sometimes coloured after they are made with browning kept for the purpose, or with some sauce or catsup, or with sugar burnt in an iron spoon.

A brown gravy, as well as a white sauce, may be made of water or stock; but it is much better to use stock, however weak it may be.

An inexpensive sauce can be made as follows:—Fry a small onion, skin and all, in half an ounce of dripping. Mix without lumps, in a basin, a large dessertspoonful of flour, and half a pint of stock. The stock must not be boiling, or the flour will go into lumps. Pour this into the saucepan, and stir till it boils. Then add pepper and salt, a little nutmeg, a teaspoonful of vinegar, and a very little anchovy sauce, or a tablespoonful of catsup or brown sauce, or a little wine; in short, anything you have at hand. Strain, and serve at once; for if it is left exposed to the air, a skin forms on the top, and the sauce is wasted. The brown gravy at the bottom of a jar of dripping should be added, if not too much burnt.

Another plan is to cut into dice a slice of lean ham,

a small carrot, half a turnip, a stick of celery, and an onion or shalot. Fry these in one and a half ounce of butter in a stewpan. When they begin to colour, stir in a tablespoonful of flour, and let it brown; then add one pint of well-flavoured stock, the rind of half a lemon, and a bunch of parsley and sweet herbs. Stir till it boils, and let it reduce to the required consistence. Add a glass of wine if liked, strain, and serve at once.

425. **Browning for Gravies.**—In an old iron saucepan put two ounces of brown sugar, and stir it over the fire till it is almost black, but not burnt. Stir in very gradually half a pint of cold or hot water. If it is put in all at once, it will boil over. Stir it again till all the sugar is dissolved, and then bottle it for use. It will keep any time. Use an old iron spoon.

426. **Celery Sauce.**—Wash two heads of celery, cut them in pieces, and stew them in white stock, or water, or milk, until they are soft enough to rub through a sieve, with a couple of cloves, a blade of mace, and peppercorns. To one pint of the stock add one and a half ounce of butter, and a tablespoonful of flour. Mix it like melted butter, and add some cream just before sending to table.

427. **Egg Sauce.**—To one pint of melted butter add three hard-boiled eggs, cut into dice, the yolk and white together, and send it to table at once.

428. **Fruit Sauce.**—Stew half a pound of any stone-fruit (cherries, plums, etc.), with a very little water, and white sugar to taste. The stones should be cracked, and the kernels pounded in a mortar. Rub the fruit through a hair sieve, and put it in a small stewpan over the fire. Mix half a teaspoonful of corn-flour or arrowroot with a little cold water, add it to the sauce, let it boil and thicken, then add a wineglassful of red or white wine, and the juice of half a lemon. Colour, if necessary, with cochineal.

429. **German Sweet Sauce.**—Put into a small saucepan the yolks of two eggs, a glass of any wine, or wine and brandy, and a little white sugar. Place it over

a slow fire, and stir it round and round very quickly with a whisk till it sets into a stiff yellow froth. If it is allowed to boil, the egg will harden, and the sauce will be spoilt.

430. Horseradish Sauce.—Wash and scrape a small teacupful of horseradish. Boil two eggs hard. Mix the yolks in a basin, with a pinch of salt and half a teaspoonful of dry mustard. Stir in smoothly one or two tablespoonsful of vinegar, and then a teacupful of sweet cream. Oil may be substituted for cream; if so, it must be put in before the vinegar, and well stirred. Made with oil, the sauce will keep some time. Stir in the horseradish, and serve.

431. Lobster Sauce.—Boil a medium-sized lobster, and cut the meat into small pieces. The sauce is smoother and sometimes preferred when the meat is pounded, and rubbed through a wire sieve. Make one pint of melted butter, add the fish, with a seasoning of cayenne and lemon-juice, and serve at once. Half a tin may be used instead. Crab and shrimp sauce are to be made in the same way. Where economy is studied, the body and small claws of the lobster should be pounded, and boiled in a pint of water to make the butter. One lobster will go much further if this is done.

432. Maitre d'Hotel Sauce.—Make half a pint of melted butter; stir in off the fire the juice of half a lemon, and a teaspoonful of parsley chopped very fine. If the parsley is cooked, it loses colour. A few spoonsful of cream will improve it.

433. Mayonnaise.—Make it in a cool place with cold materials, or it will take double time and trouble. Put the yolks of two or three eggs in a round basin; stir gradually into them, drop by drop, with a wooden spoon, from a quarter to half a pint of good salad oil. It must be stirred patiently *at first*, till it thickens. Afterwards it is not so likely to turn. The more oil and stirring, the thicker it will be. Stir in also two or three tablespoonsful of the best vinegar, not all at once, or the sauce will be too much thinned. It can be made so thick, that it will

remain on the top of any dish, and it will keep for a length of time in a corked bottle. The eggs and the oil must be perfectly fresh. Tarragon vinegar, capers, chopped gherkins, are sometimes added. This sauce should be poured over the meat, or whatever it is to be served with, just before sending to table.

434. **Melted Butter.**—For half a pint of sauce take from a dessertspoonful to a tablespoonful of flour, according to the thickness desired. Never take less butter than flour, for half a pint never less than three-quarters of an ounce, more if you like. Melt the butter in a saucepan, add the flour dry, and stir it smooth with a wooden spoon. Then add, gradually, the water hot or cold. No lumps must be left; if any appear it is very easy to stir them out with time and patience. Let the sauce boil, not merely simmer, or it will have a raw, pasty taste.

Milk or stock may be used instead of water, fish stock if it is to be served with boiled fish. A little lemon-juice, or a few drops of vinegar improve the sauce. Cream may be added just before serving, or the yolk of an egg, but neither must be allowed to boil.

Fresh dripping will serve instead of butter, and should be used in the same way, but rather more sparingly.

435. **Onion Sauce.**—Peel and scald three or four large onions. Cut them in pieces and stew them, and rub through a wire sieve. They may be stewed in stock, or water, or milk. Melt one ounce of butter, add a dessert-spoonful of flour and half a pint of the stock with the onions. Boil five minutes and serve. Some persons boil the onions whole and chop them instead of passing them through a sieve; the plan is less trouble and less good.

Brown onion sauce is made by chopping the onions and frying them in two ounces of butter. They must not be burnt but browned. Add a dessertspoonful of flour and three quarters of a pint of brown stock. Stir till it boils, simmer twenty minutes, and rub it through a sieve.

436. Piquante Sauce.—Put into a saucepan a large bunch of sweet herbs and parsley, two or three shalots, two bay leaves, a blade of mace, three cloves, salt, and one gill of vinegar. Let it cook until it is nearly dry, and then add three quarters of a pint of good brown stock, and let it stew another quarter of a hour. Melt an ounce and a half of butter in another stewpan, add a little flour and the stock, strained. Boil; season rather highly with cayenne and serve. Some persons stir in at the last a few pickled gherkins chopped fine, or some capers, or the juice of a lemon.

437. Tomato Sauce.—It is better to use fresh tomatoes when in season rather than the bottles of sauce. Cut three or four tomatoes in pieces and stew them until tender with salt, peppercorns, a blade of mace, two cloves, half a shalot, and a little white sugar. Rub them through a sieve.

Melt one ounce of butter, add three-quarters of an ounce of flour, half a pint of flavoured stock, boil and thicken. Put in the tomato, and if necessary reduce it to the required thickness by boiling fast, with no lid on the saucepan. Three or four tablespoonfuls of prepared sauce will replace the fresh fruit. Colour if necessary with beetroot or cochineal, but not unless necessary, because it is not the right colour.

438. White Sauce for Fowls, etc.—Melt one ounce of butter, add one ounce of flour, half a pint of white stock or milk, two tablespoonfuls of cream, and the juice of half a lemon. Cut the whites of two hard-boiled eggs in pieces, and stir them into the sauce after it is made. Use the yolks of the eggs for garnish.

Or, take an ounce and a-half of butter, one ounce of flour, and three-quarters of a pint of milk. Stir and boil, and then add the yolk of an egg, after which the sauce must not boil or the egg will harden.

Both the above sauces are intended to pour over boiled meat or vegetables, and to adhere to them. Half the flour will make them thick enough to serve in a tureen.

439. **Condiments.**—Condiments are not foods, but by making food more agreeable to the palate they increase the amount consumed, and by stimulating the secretion of digestive juices they assist in digestion. The taste for highly spiced foods is acquired, not natural, nor to be cultivated. The world has been ransacked to provide new zests for the palate; only a few of the more common will be noticed.

440. **Salt.**—Common salt is a necessary food, and the most common of condiments. As a food nothing can replace it. Men will undergo fatigue and danger, will part with their most cherished possessions, to obtain salt in the countries where it is scarce. As a condiment many other substances would produce the same effect.

441. **Vinegar.**—The acidity of vinegar is due to the presence of acetic acid. The best French vinegar is made by allowing white wine to ferment; in England "malt vinegar" is more common, and some inferior qualities are formed by the distillation of wood. It is coloured and often flavoured artificially. Sulphuric acid is by law allowed to the extent of one part in one thousand, but a larger proportion is often added. Large consumers of vinegar will find it advantageous to procure a "vinegar plant" and to make their own. It facilitates the digestion of many indigestible substances by its power of softening and eventually dissolving the fibre of meat. In the chapter on Meat directions are given for vinegar to be added to stews of tough and sinewy meat, and it is customary for the same reason to eat vinegar with lobster and crab. Vinegar, like all acids, hardens albumen and legumin, and, therefore, should not be added to beans, eggs, etc., except in small amount to harden the outside of albuminous foods while cooking. Tarragon, celery, and other flavoured vinegars are made by putting a small quantity of tarragon, celery-seed or other flavouring into a bottle and filling it with vinegar. After a short time they may be used in the place of catsup, or lemon-juice, for sauces. To ensure success in making pickles it is necessary to choose good

vinegar. Vinegar, in cookery, must be used carefully, but where nothing better is at hand, a small quantity should be added whenever catsup or lemon-juice is recommended.

442. Spice.—Allspice has received its name, because it is supposed to possess the flavour of all other spices. It is also known as pimento. Whole it looks something like peppercorn; it is more often ground and used for sweet cakes and puddings.

Cinnamon is the bark of a tree. It can be bought ground, or in long sticks. It has a strong, peculiar flavour, and must be used sparingly. It is not often used for anything but sweet dishes.

Cloves are the dried calyx and flower-buds of a plant. They are used to flavour soups and stocks as well as sweet dishes, apples, etc.

Ginger is the root-stock of a plant. The fresh shoots are preserved in sugar, the dried and ground shoots serve to flavour some few cakes and preserves, but are not used for savoury dishes.

Nutmegs are the seeds of an evergreen tree. They are used, probably more than any other spice, to flavour both sweet and savoury dishes of all kinds.

Mace covers the nutmeg in its natural state. It has a strong, pungent flavour, but may be used with advantage in soups and stocks.

All spices are sold ground as well as whole; they then offer greater facilities for adulteration, and are more liable to lose flavour by exposure to the air. They must be kept in tins.

443. Pepper.—Peppercorns should be used in preference to ground pepper for all clear soups and stocks, and for all white soups and sauces where ground pepper looks like dust. Peppercorns should always be removed from a dish before it goes to table. Black pepper is the whole peppercorn ground; white pepper the same thing with the outer husk removed.

Cayenne pepper has nothing in common with black pepper but its hot, pungent taste, and its name. It is

generally used for fish, cheese, and the more delicate preparations in cookery. It soon loses flavour on exposure to air, and, therefore, no quantities can be given in any recipe with any approach to reason. One sample does not differ more from another than do the tastes of different people in the matter of cayenne.

444. **Mustard.**—The flour of mustard commonly sold often contains an admixture of flour and turmeric, to meet the popular taste. In England it is mixed with water only; French mustard is mixed with vinegar, which is often flavoured with tarragon. No directions are needed except that it should have no lumps, and should be made in small quantities as it spoils by keeping. It is added sometimes to cheese and a few other dishes.

CHAPTER XV.

BEVERAGES.

445. **Water.**—Water is a compound of two gases, oxygen and hydrogen. If two flasks are filled, one with oxygen and the other with hydrogen, and if the contents of the two are allowed to mix, and a lighted match applied, an explosion immediately follows, and the sides of the flask are covered with a watery film. Pure water contains nothing but oxygen and hydrogen, but pure water does not exist in nature; it is prepared artificially by distillation.

Water falling as rain dissolves some of the air through which it falls, and it takes up also, especially in the neighbourhood of towns, particles of organic matter, vegetable or animal, carbonic acid gas, produced by breathing of living things, as well as gases and acids from the burning of fuel and other substances. Nevertheless, in the country rain-water is the purest natural water. When rain falls on the earth, it dissolves some of whatever it falls upon; it may be little or much, according to whether the substance is readily soluble or not. Thus, water falling upon or trickling through limestone takes up carbonate of lime; upon magnesium rocks, magnesia; upon granite, little of anything, and is remarkably pure. These dissolved substances are taken altogether as inorganic impurities, not because they are necessarily impure, in the common acceptation of the word, or unwholesome, but because impurity means anything that prevents water from being absolutely pure, which it is only when it contains nothing but hydrogen and oxygen.

446. Hard and Soft Water.—From the point of view of cookery, water is of two kinds only, *hard* and *soft*. Hard water is that which contains much of these earthy carbonates; soft water, that which contains little or none. It will be readily seen why rain-water is always soft, and why deep well-water, that percolates through a depth of soil, especially in chalky districts, is almost always hard. It is a matter of common knowledge, that soft water is better for cooking and washing purposes. There are two kinds of hardness, one called permanent or irremovable, because whatever one does to the water, it still remains hard; the other known as temporary or removable, because it can be removed by simple means, and the water made soft. Water temporarily hard has carbonate of lime dissolved in it; water permanently hard, sulphate of lime (plaster of Paris), magnesium, or other carbonate.

The reason is a simple one. All water was rain-water once upon a time, and when rain falls, as we have seen, it takes up carbonic acid gas from the air and dissolves it. Carbonate of lime can be dissolved in water containing carbonic acid gas, but not in water that contains none. The more gas, the more lime is taken up. Soda water is water into which carbonic acid gas has been forced under pressure, and in a bottle of soda water a piece of limestone is soon dissolved. If, therefore, one can by any means drive the gas from the water, the lime can be no longer held in solution, and will be thrown down. When water is boiled, all gas is expelled, and the result is soon seen in the deposit of limestone on the bottom and sides of the kettle, where it goes by the name of "fur." Everyone is aware that in some districts kettles are much sooner choked with fur than in others. Boiling, however, drives off *all* gases, not one alone. Fresh water sparkles because of the gases—air, oxygen, and carbonic acid—dissolved in it, and it is the loss of these that gives to boiled water its flat, insipid taste, and its uninviting appearance.

Sulphate of lime is dissolved in pure water containing

no gas, therefore boiling has no effect upon it. It is obvious that fur may be deposited from permanently hard water under somewhat different circumstances. Suppose that you continue to boil a kettle of water, the whole evaporates into the surrounding air. The inorganic matter cannot be vaporized, and therefore remains in the kettle. So long as a drop of water is there, it is as hard as it ever was, for the deposit belongs only to what has already disappeared as steam.

Hard water is bad for laundry and scullery work, because it wastes soap. It is bad for cooking, because the fur is deposited on the thing cooked, and the surface is hardened. It is best to let water boil for a few minutes, to soften it, and not to put in the greens or the meat, or whatever you have to boil, directly the water begins to bubble. For example, a cabbage put into hard water is apt to be both tough and yellow, in consequence of the deposit of lime all over its surface. Some persons assert that meat should be boiled by preference in hard water, because the deposit of lime tends to form a crust for the preservation of the juices. A small piece of washing soda or bicarbonate of soda is also added to water to soften it, but this plan can only be pursued in scullery work and in the preparation of a very limited number of foods.

447. **Ubiquity of Water.**—Water is present in all parts of the body and in all foods, even those that appear most dry. Bran contains ten per cent., and wheat-flour not less than twelve per cent. Those things that have been artificially dried, such as oatmeal, always take up water from the air, where is always a variable amount of moisture. Oatmeal does not keep well or long, and becomes musty unless it be put in a carefully closed tin away from the air. Even so dry a thing as a sheet of paper parts with water and loses weight if artificially dried. This invisible water is known as "hygroscopic" moisture, meaning literally, water that can be seen. The name is scarcely appropriate, inasmuch as the peculiarity of this moisture is that it is not seen or suspected.

448. **Water in Foods.**—All foods contain water. The process of digestion may be divided into two parts :—

1. The change of foods into some form capable of solution in water.

2. The solution of the food in water, in which state only it can be taken up into the blood-vessels.

Obviously, then, a sufficient amount of water is a necessary condition for digestion. Very dry foods not seldom occasion indigestion. On an average food contains about half its weight of water, so that in forty ounces of mixed "moist" food, there are about twenty or twenty-two of artificially dried or "water-free" food. A certain amount of water must be added in the form of tea, coffee, or other drinks, for an adult, varying from three to five pints daily.

In reckoning the comparative cost of foods it should not be forgotten that this is not always in proportion to their weight. All other things being equal, a dry food is always cheaper than a moist, because in the former case water is added by the purchaser, and increases the weight without increasing the cost, while in the latter water makes up a large part of the article purchased.

449. **Cocoa.**—Cocoa is imported in the form of the dried seeds of a tree indigenous to South America and the West Indies, called the *Theobroma cacao.* The cacao is not to be confounded with the cocoa-nut. The seeds are roasted to develope the aroma, afterwards prepared in a variety of ways. Unlike tea and coffee, cocoa contains a large amount of nourishment, fat, starch, and albuminous matter, so that it has been compared to milk, and is habitually used by travellers as a portable and agreeable food. It also contains theobromine, similar to the essential principle in tea and coffee, and a volatile oil to which it owes its aroma developed during roasting.

Cocoa-nibs are the crushed kernels of the seeds without admixture. They are the purest cocoa, but since only a decoction of them is consumed and not the

kernel itself, they are not the most nourishing form. Put them into cold water, and boil slowly for several hours. Strain and cool, then skim off the fat, which is disagreeable to most persons. From some cocoa-nibs the fat has been removed. It must not be made and kept several days, as it loses its aroma. The prepared cocoas are sold under different names, and have, almost all of them, some admixture of sugar or starch, or both, to diminish the oily consistence of the cocoa paste. This is not an adulteration, since it is considered by most persons as an improvement. It is sold as an admixture, and at a much lower price than would be asked for pure cocoa. Sometimes red colouring matter is used as an adulteration, and the husk is ground up and mixed with the kernel in the lowest-priced cocoas. Mixtures with Irish moss, condensed milk, lentils, are also sold. Prepared or soluble cocoas can be made with boiling water or milk. The flavour is much improved by a few minutes' boiling, when less cocoa may be used.

Cocoa of any kind is more nourishing than tea or coffee, even though these have milk added to them. Chocolate is a superior preparation of cocoa, used as a luxury. Used as a beverage it must be carefully mixed with a little cold milk, then stirred into boiling milk or water, and boiled for one or two minutes.

450. Coffee.—The coffee bean of commerce is the seed of a small berry resembling a cherry, grown on a shrub indigenous to Abyssinia. It has been transplanted into many different countries, and various kinds are known by the name of the country to which they are peculiar.

Mocha coffee is small and round, generally considered the best. The smallest beans are to be chosen. A mixture of mocha and plantation coffee, half of each, is good.

In England the roasting is done in large establishments, and coffee is purchased not only roasted but ground. Thus much of the aroma, due to a volatile oil, escapes. It is better whenever practicable to buy coffee

unroasted, and to roast only a small quantity at a time. It can be done without a revolving roaster in a tin over the fire or in the oven, care being only taken to get all roasted to the same degree, and to turn and shake the pan frequently. If roasted too little, the aroma is not developed; if too much, it is lost, and a strong, burnt taste acquired instead. As soon as it is roasted it should be put in a close tin, and it should be ground only in small quantities, as it is wanted.

Coffee should not be boiled, as it loses flavour. Nevertheless, when an infusion only is made, much of the strength of the coffee is lost, and as this is a matter worth consideration where large quantities are used, the following plan is recommended: Boil the grounds of yesterday's coffee in water for fifteen minutes, and use this decoction in the place of water to make the coffee of to-day. By this means the aroma of the fresh coffee is preserved, and all the soluble parts are at the same time extracted.

The milk that is added to coffee must be boiling, as the flavour is thereby improved. If café au lait is desired, there is no better plan than to have a large saucepan of milk on the fire, and to pour the coffee into it as it is made, taking care only that it does not boil up after the coffee is in or it may curdle. A French tin coffee-pot is the best to use, and it should not be too large.

Chicory is added to make the coffee darker, and in the opinion of many to improve the flavour. It should be bought separately, and from one to two ounces put with one pound of coffee.

Coffee gains bulk and loses weight in roasting. The essential principle is caffeine, identical with theine in tea.

Neither tea nor coffee are to be looked upon as articles of nutrition except by virtue of the milk and sugar generally mixed with them. They act upon the nervous system, relieving the sensation of fatigue and hunger. They diminish the tendency to sleep, and therefore coffee is employed as an antidote to narcotic poisons.

451. Tea.—The quantity of tea consumed annually

in England is said to be nearly four pounds per head of the population. Many different sorts are sold and many adulterations practised. Besides the theine before mentioned, tea contains a volatile oil and an astringent, tannin. The amount of actual nourishment in the infusion may be taken as *nil*. Tea should not be boiled, as the aroma is by this means lost, nor should it be infused for a long time, as the tannin is extracted, which gives a rough and bitter taste.

Used in moderation tea is restorative, and its general employment leads one to suppose that it has a marked beneficial action of some kind. Taken immoderately, at all hours of the day, before food, or with insufficient food, there is abundance of evidence to prove that tea is injurious, producing nervous symptoms and chronic indigestion. For children cocoa or milk is much to be preferred to tea or coffee. Where water is bad it is beneficial, in so far as its use ensures the boiling of the water, and its astringent properties are said to have a purifying action on marsh water. Tea should be taken with or after food, not before or without it.

Tea is measured by the spoonful, but it is an inaccurate measure, because some tea being fine or dusty, lies closer in the spoon than others. It is not always the lowest-priced that is the cheapest, or the darkest infusion that is the strongest. Soft water makes stronger tea than hard, but by extracting more of the astringents as well as the colouring matter, it makes a bitter and worse flavoured beverage.

Warm the pot, and remember that boiling water having been poured into a cold vessel is no longer "boiling." Do not let it stand longer than ten minutes, and do not set the pot on the hob. A teapot must be kept dry, or the tea will taste musty. Cold tea should be poured into a jug, not left on the leaves.

Much of the cheap and broken leaf tea is very worthless; sweepings of tea warehouses, and used leaves dried and recoloured, and not worthy the name of tea. And the presumptive evidence is decidedly against the

good quality of tea that needs the fiction of a "present" of books, or what not, to assist its sale. Economy points to the purchase of the tea at its plain market value, without any make-weight. Do any of the purchasers believe that they get their books for one penny less than their price?

Paraguay tea, or maté, is prepared by dressing the leaves of the Brazilian holly. It also contains an essential principle once known as paraguaine, but now known to be identical with theine and caffeine. Other leaves have been employed in different parts of the world, in the same way that tea has been employed from time immemorial by the Chinese. All contain theine, or possess similar properties.

Various beverages are prepared for the sick room, such as—

452. **Rice or Barley Water** may be made thick or clear. The one is a decoction, the other an infusion. For the thick, soak two ounces of pearl barley or rice in one quart of cold water for several hours; then boil for an hour, strain and sweeten to taste. It may be flavoured with lemon-peel, etc. For the clear, boil the water, and pour it when boiling on the rice or barley. Cover it closely, and let it stand till cold. The thick, of course, contains more nourishment, but the amount of solid in that is slight. Useful in so far as it ensures the boiling of the water, and conceals its flat, insipid taste.

453. **Toast Water.**—Cut a thin slice of bread and toast it slowly on both sides until it is dried quite through. Then plunge it into a jug of water. If there is bread between the toast, or if the water is poured on the bread, it is apt to be thick, and it should be as clear as sherry, and the same colour.

454. **Lemonade** (1).—Pare two lemons very thinly, *None* of the white pith must be used. Put the peel in a jug with the pulp cut in slices. Take care to remove all the pips, as they make it bitter. Add sugar to taste,

and two to three pints of boiling water, according to the size of the lemons. Let it stand twenty-four hours, and it is ready for use.

455. **Lemonade (2).**—Two ounces of citric acid, the rind and juice of two lemons, thirty drops of essence of lemon, three pounds of lump sugar, three pints of boiling water. Keep corked. Use about half a wineglassful to a tumbler of cold water.

456. **Oatmeal Drink.**—Sometimes made by merely stirring coarse oatmeal into cold water. Better made by boiling a tablespoonful of coarse oatmeal in one quart of water for half an hour, after which it can be strained or not. Is very nourishing, quenches thirst effectively, and it is worth remembering that the hardest manual labour ever recorded was performed without beer or spirits, with an unlimited supply of oatmeal drink. It is employed by stokers and workmen in factories, and would be an excellent food for children. It is generally approved when mixed with cocoa in the place of milk. It can be flavoured with cloves or lemon-peel, and sweetened with brown sugar.

457. **Raspberry Vinegar.**—Put into a basin four quarts of raspberries well picked and bruised, and one quart of vinegar. Let it stand three days, stirring occasionally with a wooden spoon. Then squeeze it through a strainer into an earthen-jar, add one pound of lump sugar to each pint of juice. Put the jar into a saucepan of cold water, set it on the fire and let it boil three quarters of an hour. When cold put it in bottles and cork them. Black currants may be used in the same way.

CHAPTER XVI.

SICK-ROOM COOKERY.

458. **Invalids' Food.**—In preparing food for an invalid several facts must be kept in view. First, only those foods that can be digested must be given. It is not all the food put into a man's mouth that does him good, but only so much of it as he is able to make use of for the nourishment of his body.

In acute disease the doctor will be the best judge of the food that is to be given, and his orders should be implicitly obeyed. During convalescence from acute disease your aim should be to get up the strength of the invalid as quickly as possible by giving him all the nourishing food he can digest, at the same time avoiding every chance of indigestion, which would very likely bring on a relapse. For persons in strong health it is by no means always desirable to put the right amount of nourishment into the smallest possible compass, or, indeed, to make the food as digestible as possible. In agricultural districts, where the people live and work out doors, foods are often disused for no other reason than because they are quickly digested and soon need to be followed by a fresh supply for the digestive organs to work upon. And it is notorious that many preparations, highly-prized in the country, cause a shudder of disgust to the townsman, who takes little exercise and cannot obtain much fresh air. For the convalescent no food can be too easily digested; the difficulty generally encountered is to get a sufficient amount of food taken.

It happens, sometimes, that an almost constant craving for food is an accompaniment of convalescence from acute disease, and to gratify the craving would be dangerous, perhaps fatal.

The food should be apportioned to the power of the digestive organs, rather than to the hunger of the patient.

Often it is better that the food should be subdivided, so the mastication may be less important.

Give food often, but little at a time.

It is not only the digestive organs that have to do with the assimilation of food, but the will also. All other things being equal, that food is most digestible, which is most agreeable to the individual. And if this be true of health, it is far more true of disease, where the appearance of well-arranged food may be a welcome episode in long hours of weariness. Here it is that the art of the cook comes in. Vary the food day by day, and never repeat one recipe until it excites disgust. If you cannot vary the food, change the flavouring, or the form, or the manner of serving.

Send into the sick-room only as much food as is likely to be eaten; what remains must not be sent up again. It is a mistake to make a large dish of anything, and to expect a patient to begin afresh each day where he left off the last.

It is perhaps not quite superfluous to remark, that what comes out of a sick-room, especially where a person is recovering from any communicable disease, is not to be eaten by anyone else, however tempting it may appear. It is to be thrown away, or burnt at once.

Make everything look as pretty as possible. Do not serve a little broth in a very large ugly basin.

No cooking should be done in a sick-room.

Very little seasoning or flavouring should be used; it is often better to use none.

Many of the recipes given in former chapters will be found suitable for the sick-room, as well as the few recipes that follow.

459. Beef Tea.—Beef tea should be made of lean

meat only, not of the coarser parts, nor of bone, and therefore if properly made it does not set into a jelly when cold. It contains only the soluble constituents of the meat. A man fed on beef-tea only, as strong as it could be made, and as much as he could swallow, would die of starvation. Nevertheless it is most valuable as a restorative and stimulant, and can be taken when no other food can be borne. It may be mixed with a little cream or farinaceous food. Taken the last thing at night beef-tea is useful to those who suffer from sleeplessness.

Cut the meat into small pieces and take away all the fat. Put it into an earthen jar, add to each pound one pint of cold water, tie a bladder or brown paper over, and set the jar in a cool oven or in a saucepan of cold water. Bring it slowly to the boil, and let it cook four or five hours. Then strain it through a rather coarse strainer, and skim off the fat with paper. (See page 86.) Give the brown sediment as well as the clear part.

Never make beef-tea in an iron saucepan. A jam-pot or soda-water bottle is always to be had. Metal gives an unpleasant flavour, easily detected by the delicate taste of an invalid. Beef-tea may be flavoured with lemon-peel, a clove, a sprig of parsley, a bit of tomato, etc. Any of these may be added to the beef if desired. It is better to vary the flavouring from day to day. There is no advantage in putting salt before cooking, and sometimes salt should be left out altogether, as well as other flavouring,

460. **To Make Beef Tea Quickly.**—Take lean beef, not sinewy, and cut it into strips. With a sharp knife scrape it, taking away all fat and sinew, in fact everything that is white. To each pound allow one pint of cold water. Let it stand in a basin or cup for twenty minutes or longer. Then boil it for five minutes, and no longer. Strain, and it is ready for use.

461. **Raw Beef Tea, or Meat Juice.**—Make as the above, but do not boil it. When it has stood the twenty minutes, strain it, and it is ready. It has the same taste as cold cooked beef-tea, but because it looks

disagreeable, it should be given in a covered cup or coloured with a little of Liebig's Extract, always supposing the patient not to be too ill or too young to notice the appearance. It is given in cases of typhoid fever, and is much easier of digestion than the ordinary preparation. If raw beef-tea be strained and boiled, it is no longer a clear solution, but the brown sediment seen in cooked beef-tea falls to the bottom. Meat juice is given to infants, the only preparation of meat not exceedingly likely to bring on convulsions. It is sometimes prepared by adding a few drops of hydrochloric acid to the water, but the simpler plan is rather to be recommended to the general public.

462. Raw Beef.—Beef is occasionally eaten raw, with very beneficial results. The meat should be scraped, as for beef-tea, and then rubbed through a fine wire sieve. It may be given in many forms. Some persons will take it made into a sandwich with bread and butter. The edges should be concealed, and a little seasoning added. For those who like the flavour of Liebig's Extract, a little scraped beef may be added to each cupful. The Liebig must be only just warm enough to colour the beef, not hot enough to toughen it.

463. Essence of Beef.—There is, as a rule, no advantage to be gained by making beef-tea stronger than the recipes above given. Essence or extract of beef is not often required. It can be made by the first recipe for beef-tea, using no water, or more quickly, by *scraping* the beef and putting it into a saucepan closely covered, without water, over a slow fire. In ten minutes the juice may be strained off.

464. Liebig's and other Extracts.—Liebig's Extract contains little or no nourishment, is an excellent stimulant, but not to be substituted for beef-tea, certainly not for food. Brand's Extract or essence is sold in tins, also in sausage skins; both contain some nourishment. The price of the tins puts them beyond the reach of many; the sausage skins are cheaper, and directions are given that a small piece shall be boiled in water for a few

minutes. The contents of the tins can be eaten hot or cold, without water. They do not keep more than a couple of days after they are opened. Other similar preparations are in the market. The "fluid meat" prepared by Messrs. Darby and Gosden is altogether different. It is meat artificially digested, and therefore contains not only the soluble constituents of the meat, but the whole of it, in such a form that it can be readily assimilated, without further change, in the stomach. It is sold in small jars, which do not keep more than two days after being opened.

465. **Beef Broth.**—Beef broth is not the same thing as beef-tea, though it is often called by its name. To every pound of beef, meat and bone together, allow a pint or a pint and a half of cold water. Cut the meat small, remove the fat, break the bones. Let the whole stand by the side of the fire for several hours before it boils, then boil it for two hours, strain, skim, and serve. This generally sets into a jelly, and is much cheaper, but not nearly so good as beef-tea, which should be made of the lean meat only. Shin or leg of beef may serve for broth.

466. **Mutton Broth.**—This may be made by any of the recipes given for beef-tea or broth. A cheaper method is to take a piece of neck or scrag of mutton, and to put it in a saucepan, with half an ounce of pearl barley or rice, salt, and cold water enough to cover it. Let it boil slowly, skim it, let it simmer for two hours; then take out the mutton, and serve the broth with the rice. Do not use an iron saucepan. The mutton may be eaten with melted butter. A little chopped parsley is often added to the broth just before serving.

467. **Chicken Broth.**—This may be made of bones, only provided they have not been cooked before. A whole chicken is much better, and need not be a young one. Cut the fowl into joints, and put it in a jar with a little salt, and cold water enough to cover it. Cook it in the oven, or in a saucepan, four or five hours, then

strain and serve, having removed every particle of fat. The broth is less rich if the fowl is skinned.

468. **Barley Gruel.**—Wash and soak in cold water one ounce of pearl or pot barley. Put it on a slow fire with one pint of beef-tea or broth, and let it simmer for two hours. Then strain, salt to taste, and serve hot. It should be quite thick.

469. **Sago Cream.**—Cook one ounce of sago in one gill of water until it is tender. Add gradually half a pint of beef-tea, let it cool a little, then stir in the yolks of two eggs, beaten with a quarter of a pint of cream or new milk. Let it thicken, but not boil, or the egg will harden. Corn-flour and arrowroot may be used instead of sago.

470. **Suet and Milk.**—Scrape one ounce of beef or veal suet, and tie it loosely in muslin. Put it in one quart of milk, and boil it until nearly all the suet has disappeared. It should be served hot, and may be flavoured with sugar and cinnamon.

471. **Lime-water and Milk.**—The addition to milk of an equal part or less of lime-water makes it more digestible. Soda-water is sometimes mixed with milk for the same reason. Many invalids and some healthy adults are unable to digest milk alone.

472. **Panada.**—This may be made of chicken or any other meat. Cut the meat small, and put it in an earthen jar with a close-fitting lid. Stand the jar in a saucepan of boiling water for two hours. Take the meat out, pound it in a mortar, and rub it through a wire sieve. It will go through more easily if the gravy is poured on the sieve a little at a time. Add a little salt, and sufficient cream, or cream and beef-tea, to make the panada sufficiently liquid. Serve cold or hot.

473. **Barley Cream.**—Take half a pound of veal, or other meat finely minced, half a pint of water, and half an ounce of barley. Cook slowly two hours or more. Pound the whole in a mortar, and rub through a sieve; then add salt to taste, and one gill of cream. Rice may be used instead of barley.

474. **Eggs with Brandy.**—Beat yolk to a cream and white to a froth, and then mix them. Add gradually a small wineglassful of hot water, with a tablespoonful of brandy, white sugar, and cinnamon or nutmeg if liked.

475. **Gruel.**—Take one tablespoonful of coarse or fine oatmeal, or of prepared groats, and mix with a little cold water in a basin. Boil one pint of water with a piece of butter, and pour it into the oatmeal, stirring to prevent lumps. Put it back in the saucepan, and boil it again, still stirring. Coarse oatmeal will be done in half an hour, fine oatmeal in twenty minutes, and prepared groats in five to ten minutes. Sweeten with sugar, and flavour with nutmeg, a glass of wine, or brandy. Some persons prefer it strained. It may be made with milk, but then no wine must be added.

476. **Arrowroot and Corn-flour.**—A cup of arrowroot is made in the same way as a cup of gruel, but it needs no further cooking if the water is quite boiling when it is poured into the basin. Corn-flour is better for being boiled two or three minutes. The amount of nourishment is the same in both, but arrowroot is somewhat easier of digestion. If a nutritive food is desired, it must be made with milk; an egg may also be added.

For arrowroot puddings see Paragraph 367. Or make a small teacupful of arrowroot, and stir into it one egg. Butter a cup, and steam the mixture for twenty minutes. Turn it out, and serve hot or cold.

477. **Jellies.**—See Paragraph 276.

478. **Linseed Poultices.**—Use crushed linseed with the oil in, not linseed meal, out of which the oil has been pressed. Warm two plates in the oven. Tear a piece of rag about half an inch larger all round than you intend the poultice to be, and do not make the poultice too large. A poultice too large is apt to spread the sore it is intended to heal.

Two large basins, a wooden spoon, a knife or spatula, and a kettle of boiling water, must be close at hand. Warm the smaller basin, and put it into the larger one, which should be filled with hot water. Put some linseed

into the inner basin, and *as quickly as possible* pour boiling water over, and stir it with the spoon or a knife, adding more linseed or water till it is of the right consistence. Spread it on the rag with the knife evenly, about half an inch thick, leaving three-quarters of an inch of margin all round. Fold the margin over, and apply the poultice at once. Or if it has to be carried to, or kept for the patient, enclose it between the two hot plates, and wrap them in flannel. The linseed ought not to stick to the skin, and will not if it is well made and not too moist. The surface may be oiled with a feather, and that will prevent its sticking; or the poultice may be covered with a piece of thin muslin, to be cut exactly to the size, and laid on before the margin is folded over.

Another way is to set a large basin over a saucepan of boiling water, and to put the linseed in it. Add boiling water very gradually, and beat it with a knife as you would beat an egg, until it becomes quite white and frothy. Take a large square piece of thin rag, put in enough linseed to make the poultice, and fold the ends over the back like a parcel. This plan is only better than the former in unskilful hands. It has also this advantage, a large quantity can be made at once, and kept covered and hot, ready for use at any hour of the night. A poultice should never be made so moist that water trickles from it. The great art is to make it quickly, and apply it very hot. Powdered animal charcoal is sometimes mixed with the linseed.

It is a mistake to make a bag for a poultice, because it gets cold before it gets into the bag.

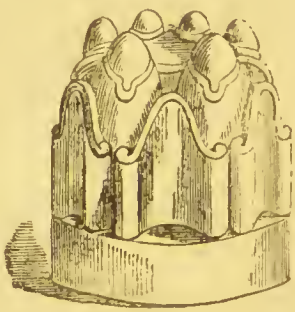
479. **Mustard Poultice.**—Make a linseed poultice by the first recipe, but boil a little mustard in the water that you use.

Or make it by the second, and sprinkle a little dry mustard on the centre of the rag before you put the linseed in.

480. **Mustard Plaster.**—Make some table mustard with water, not vinegar, and spread it on a piece of brown

paper. Cover it with a piece of very thin washed muslin.

481. **Fomentations.**—These are easier to apply and cheaper than poultices, because the same materials can be used over and over again. To apply a fomentation means to wring a piece of flannel out of boiling water, and to lay it on the skin. The flannel must be so dry, that no more water can be squeezed from it; and when that is the case, it cannot be too hot. Fold a piece of flannel four times thick, and the required size. Take a towel, or a piece of ticking, and sew or pin a deep hem in each end. Into each hem run a short, thick piece of wood. (A piece of stick, a wooden spoon, a small iron rod, anything will serve.) This makes what is called a "wringer." Put this over a basin, with the ends outside, and lay the flannel in the middle. Pour boiling water over, and wring the flannel by twisting the sticks in contrary directions. One person can do it; two are better. Unroll the wringer only at the last moment. If turpentine, opium, etc., is used with a fomentation, it must be sprinkled on the side of the flannel that is to be next the skin. Cover the flannel closely with cotton-wool and oil-silk to keep in the heat.



CHAPTER XVII.

FOOD AND ITS USES.

482. **Food.**—The popular opinion about food is that all are much the same, or rather that the value of one differs only from that of another because its bulk is greater, and its flavour more agreeable, or because it costs a few more pennies per pound.

483. **Ingredients of Food.**—Out of nothing, nothing can come. Our bodies grow tall or fat because they add to themselves the food that we have eaten. Suppose that a man passed his life on one end of a delicate balance, every time that he ate or drank the balance would sink to a perceptible degree, but at all other times the balance would rise, imperceptibly perhaps, but none the less surely, because in the mere act of living the man would wear out and become lighter. Suppose farther that if the man had no food for twenty-four hours the scale rises six inches, then it is clear that in order to keep his weight he must in twenty-four hours eat just so much food as will sink the scale to the extent of six inches. If he eats too little, the scale will rise, showing the man to be lighter; if too much, the scale sinks because the man has gained weight.

But it is not only in weight that the daily loss must equal the food. The two must contain the same elements (one is tempted to write "the same ingredients" in a Cookery book), for it needs no great insight to perceive that otherwise the composition of the man's body would very soon undergo a radical change. Continually draw beer out of a cask and pour water in at the top, how long would it continue to be a cask of beer? If therefore we

know what is lost from the body we shall know also what we must find in the food. From the lungs is given off at each expiration carbonic acid gas with some water; from the skin water with a little carbonic acid gas; from the kidneys ammonia (or urea) and water.

Water, as we have seen, is a compound of oxygen and hydrogen.

Carbonic acid gas is a compound of oxygen and carbon.

Ammonia contains nitrogen and hydrogen.

The bulk of the food then must be some substance or substances containing the three gases—oxygen, hydrogen, and nitrogen, and the black solid substance carbon, most familiar under the name of charcoal or coke.

Sulphur and phosphorus, sodium, potash, lime, chlorine, iron, magnesia, and some other substances, must also be supplied in the food. No one of these can replace another however closely it may resemble it.

484. **Oxidation.**—Water and carbonic acid gas are produced by oxidation of anything that contains hydrogen and carbon, and oxidation is only another name for burning; it means combining with oxygen, and we know that hydrogen combined with oxygen makes water, while carbon with oxygen is carbonic acid. In this *burning* heat is produced, and so the heat of the body is maintained. We shall see that some of our foods contain nothing but carbon, hydrogen, and oxygen, and that these are the foods whose part it is to keep up the animal heat.

485. **Nitrogen.**—All living plants and animals contain some nitrogen. Every housekeeper knows that anything containing nitrogen—for instance, meat—is much more liable to decompose than anything in which there is no nitrogen, like sugar or arrowroot. This is but the narrow application of the wide fact, that compounds of nitrogen are unstable, they are always trying to enter into fresh combinations and to form simpler compounds, and whilst changing themselves they excite change in other bodies. Plants, as a rule, contain less nitrogen than animals. There seems to be some relation between the amount of nitrogen and the activity of the changes

that, taken together, we call life. But it will be sufficient for our purpose to remember that nitrogen is to be found in all the active tissues of the body, and that nitrogen must therefore be supplied in the food in order to form these tissues.

486. **Classes of Food.**—Foods are placed in one of two classes:—

I. Those that do contain nitrogen, or "nitrogenous."

II. Those that do not contain nitrogen, or "non-nitrogenous."

487. **Non-nitrogenous Foods.**—These are: 1. Fats and oils of all kinds, animal and vegetable. They are compounds of carbon and hydrogen with a little oxygen.

2. Starch, sugar, cellulose, all containing carbon, hydrogen, and oxygen, and known as "carbohydrates," because the hydrogen and oxygen are in the right proportion to form water.

3. Citric, malic, tartaric, and other vegetable acids. All these non-nitrogenous foods are compounds of carbon, hydrogen, and oxygen, in different proportions, and they generally are oxidized in the body and produce heat. Therefore they are often spoken of as the heat-giving foods. Mainly heat-giving they are; exclusively heat-givers, not; for fat is a tissue not containing nitrogen, and is formed out of non-nitrogenous food, generally carbohydrates. Recalling for the last time the man in the balance, we shall find that if he works hard the scale ascends quicker than when he undergoes no exertion. The harder the work the more carbonic acid is given off. It is the non-nitrogenous foods that are oxidized to form carbonic acid, and therefore the name of "force-producers" is given to them by some writers. Whatever the work is, some force is expended to do it. The man walks—then he lifts his body along the road. Does he walk up a mountain? Then he lifts his body along the mountain-path and up the height of the mountain as well. So exactly does the amount of carbonic acid balance the work done, that a man standing still

gives off more than sitting still, and sitting empty-handed he wastes less than if he sits and works. Some of the non-nitrogenous food must be fat. It aids in some way the absorption of other foods. The minimum allowance is from one to two ounces. The rest of the non-nitrogenous food may be starch. But fat burnt in the body gives more heat than starch; one ounce of fat being reckoned as equal to two and one-third ounces of starch or sugar. It is much the same as if one should say that one pound of Wallsend coal burnt in a stove will heat a room better than two pounds of peat burnt in its place. All fats have nearly equal value, except that some are more digestible than others; cod-liver oil is most digestible of all, and is therefore used as a food for such invalids as need fat, and are unable to digest the commoner forms of it. In cold countries immense quantities of fat and oil are consumed, but little or no starch. If instead of each pound of fat it were necessary to eat two and one-third pounds of starch, probably the digestive organs of even an Esquimaux would prove unequal to the task of assimilating so enormous a bulk of food.

488. **Nitrogenous Foods.**—The most common are: *Albumen* in lean meat, eggs, and in many vegetable foods in small amount. *Fibrin*, in meat, fish, and all cereal grains. *Casein*, the curd of milk. *Legumin*, in pulse, known also as vegetable casein. *Gluten* in flour. They are also known as albuminates and as proteids. All contain carbon, hydrogen, oxygen, nitrogen, with sulphur, or phosphorus, or both.

Gelatine, and similar substances in the skin, bones, and sinews of animals. (Vegetable jelly contains no nitrogen, is called *pectin*, and is quite different.) Contain carbon, hydrogen, oxygen, and nitrogen.

489. **Flesh-Formers.**—Just as the non-nitrogenous foods are called heat-givers, so the nitrogenous have received the name of tissue or "flesh-formers," because without nitrogen, no tissue of the body can be formed. But not all foods that contain nitrogen are capable of forming tissue. Gelatine is a nitrogenous food, so are tea

and coffee, but gelatine cannot supply the place of albuminates, though it may economize them. The popular idea that jelly is the one thing needful for an invalid must give way to the belief that gelatine is the least valuable of all nitrogenous foods. The true flesh-formers are the albuminates, so called because albumen is one of their number, and whatever else is supplied in the food one of these is necessary. The infant forms flesh out of the casein in milk, the vegetarian depends upon vegetable albumen and the legumin in pulse, while most adults in health eat all albuminoids in turn.

490. **Use of Flesh-Formers.**—The name of flesh-formers sufficiently indicates their use. In a short space of time the child more than doubles his size and weight; afterwards, indeed at all times, a man lives and moves, and whenever he moves he wears out, as all things wear out, by friction. So much nitrogen is lost every day, and if it is not supplied in the food, then it is taken away from the body and the body wastes.

Is it then nitrogenous or non-nitrogenous food that must be increased during hard work? Clearly, both. If the driver of the "Flying Scotchman" were deprived of half his coals, no man in his senses would expect him to keep express time. On the other hand, one is ready to believe that the framework of an engine that does much work wears out quicker than that of the engine that does little, and one finds that, in practice, all men increase the albuminates in their food according to the manual labour they are expected to perform.

491. **Mineral Matter.**—So far, then, we have already supplied carbon, hydrogen, oxygen, and nitrogen, with sulphur and phosphorus. The other elements are in small amount, and for brevity's sake we may speak of them together as *mineral matters*, or *mineral salts*. *Chloride of sodium* (common salt) is a compound of chlorine and sodium, and is the only mineral matter added habitually to food.

Potash is found in the green leaves of plants, in fresh vegetables and fruits.

Phosphate of lime is found in corn-plants, and from them we get our chief supply. Sometimes these mineral salts are characterized as the bone-formers. Speaking generally, they serve one of two purposes; they form the hard part of bone, which is chiefly phosphate of lime, or they help in the digestion and assimilation of other foods. The child who has too little phosphate of lime, or who lacks the power to make use of it suffers from soft bones—rickets—and the sailor who lives upon salt-meat without vegetables falls a victim to scurvy.

492. The Food of Man.—To sum up, a man's food must consist of—

Non-nitrogenous	1. Fat or oil. 2. Some carbohydrate, either sugar or starch.
Nitrogenous	3. Albuminoids.
	4. Mineral salts.
	5. Water;

which is precisely the same conclusion as we arrived at when speaking of milk.

Of course, every arrangement of actual foods under the head of nitrogenous or non-nitrogenous must be, to some extent, arbitrary and misleading. Many foods contain too little nitrogen or a mere trace of fat, but unless they are artificially prepared they all contain some, because all were at one time living bodies.

493. Food Table.

Non-Nitrogenous.	Nitrogenous.
Fat meat, dripping, bacon.	Lean meat, game, and poultry.
Butter, cream.	Curd of milk, or cheese.
Vegetable oils.	Gelatine.
Much starch in flour, rice, potatoes, sago, tapioca, and all corn plants.	Comparatively little gluten and fibrin in corn plants.
Sugar and treacle.	Eggs.
Some of the oily fish.	Most fish.
Most vegetables and fruits.	Peas, beans, and lentils.

A cursory inspection of this table leads to several conclusions. It is the non-nitrogenous foods that are cheap. If enough food of any kind is to be obtained, there is sure to be no scarcity of bread, potatoes, or rice. Therefore the underfed want nitrogenous foods, and suffer from that want. It is a mockery to offer rice to the starving poor, but it is of great use to teach the value of peas, beans, and lentils. On the other hand, it is among the nitrogenous foods that we seek to gratify the pleasures of the table. It is not less true that a large number of persons suffer from a too great consumption of meat, eggs, fish, game, and cheese. Again, nitrogenous and non-nitrogenous are mixed in most common articles of diet. Not to speak of the instinct that leads one to eat fat pork with the over-nitrogenous pulse, eggs and milk with starchy foods, and that guides the rice-eating Hindoo to supplement his scanty fare with clarified butter and beans, it is easy to see that lean and fat meat are not naturally separated by a straight line, that bread might stand equally well on either side of the table, and that even the oily fish are not wholly oil, but contain some fibrin and albumen.

494. **Amount of Nitrogen and Carbon.**—The amount of nitrogen is reckoned as 300 grains, or 15 grammes daily; that of carbon as 4,900 grains (480 grains equal to 1 ounce avoirdupois).

495. **Diet of Adults.**—The average diet of an adult with moderate exercise has been reckoned at

Fat . . .	$2\frac{1}{2}$ oz.
Carbohydrates, from	14 to 22 oz.
Albuminates . .	4 to 5 oz.
Mineral . . .	$\frac{3}{4}$ to 1 oz.

It will be understood that these are only approximate calculations, and must vary with individual peculiarities, with the amount of work, and with the temperature. The human body remains always at 98 degrees Fahr. or 35 degrees Centigrade, in whatever climate. That is generally far above the heat of the surrounding atmo-

sphere, but it may be even beneath it. Naturally, since all that heat comes from the oxidation of the food, more food is needed in winter than in summer, in cold climates than in the tropics. Europeans often suffer because they consume the same amount and the same kind of food in India as they were accustomed to take in England.

Take two machines made on the same plan: one will always do more work than the other on the same fuel, and these individual peculiarities are much more marked in the human machine.

Dietaries such as this are valuable in providing for a large number of men, but it may be questioned whether they have any direct bearing on domestic economy. Where the diet is plain and simple, appetite forms the best guide to its amount. All writers, however, agree "that there is far more evil to be encountered attributable to too much food being taken, rather than too little," and one well-known goes so far as to say that "from the point of view of alimentation, the art of cookery has no other object than that of making a huge excess of food find agreeable entrance into the human body." It is open to every cook to disprove the truth of that statement so far as she is concerned, by keeping another object in view, yet not forgetting her art.

With the best food material in the world, the English (with one exception?) are of all people the most wasteful. It is the part of the cook to prepare food so that the greatest possible amount of nourishment may be obtained, and so that every person may have the most agreeable and wholesome food that it is possible to purchase with the money that he finds it convenient to spend. And whether that is much or little, has nothing to do with the matter, for a cook who uses her head as well as her hands will make the cheapest food palatable, as well as pleasant to see, while without knowledge she will never be anything more than a slavish repetition of other people's ideas, incapable alike of practising economy, of ministering to health, or of rising to the height of culinary art.

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