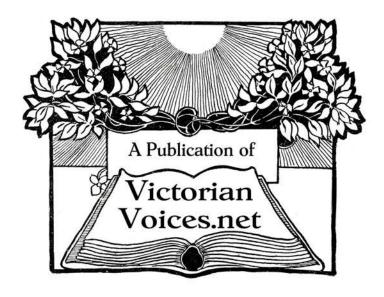


Victorian Times

A Monthly Exploration of Victorian Life

Vol. B~2, No. 3
March 2025

edited by Moira Allen



Visit VictorianVoices.net for over 12,000 articles from Victorian periodicals and anthologies, plus:

- Extensive Victorian image collections
- Our huge online Victorian fashion gallery
- Our own original Victorian anthology compilations
 - Victorian coloring books
 - Victorian & vintage greeting cards & gifts

Find out more at www.victorianvoices.net

Copyright © 2025 by Moira Allen Print Edition Independently Published Print Edition ISBN 9798310724693

Individual articles in this collection are in the public domain.

This publication may not be reproduced in its entirety by any means, physical or electronic, without the permission of the editor.

If you are interested in reprinting individual articles or images from this publication or from VictorianVoices.net, please contact the editor, as we can usually provide higher resolution versions of these materials that are better suited for publication.

Cover Image: Print from a Victorian seed catalog of the 1890's.

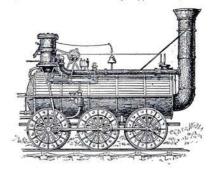
www.victorianvoices.net • editors@victorianvoices.net

Victorian Times Vol. B-2, No. 3 March 2025

- 4 Editor's Greeting: Is a Picture Worth a Thousand Words? by Moira Allen
- 5 The Sorting of Paupers, by Edith Sellers (UK-English Illustrated Magazine, 1892)
- 10 A Month's Holiday in London for Country Girls (UK-Girl's Own Paper, 1897)
- 11 [Colorado] A Symphony in Yellow and Red (US-Atlantic Monthly, 1875)
- 17 Hand-Made Buttons (UK-Girl's Own Paper, 1898)
- 18 Bulgarian Embroidery, by Josepha Crane (UK-Girl's Own Paper, 1893)
- 20 Cookery Recipes (UK-Girl's Own Paper, 1900)
- 21 Some Lenten Dishes: Eggs and Codfish, by Dorinda Paul (US-Good Housekeeping, 1895)
- 22 Every-Day Desserts, and Desserts for Every Day, Part 10, by Ruth Hall (US-Good Housekeeping, 1889)
- 23 Poem: "The Buffalo Bug," by Anna M.L. Moody (US-Good Housekeeping, 1886)
- 23 Buffalo Bugs, by M. Louise Robbins (US-Good Housekeeping, 1889)
- 24 Housekeeping in Foreign Lands: Paris (US-Good Housekeeping, 1889)
- 25 Originating Fashions (US-Good Housekeeping, 1888)
- 26 Housekeeping in France (UK-Girl's Own Paper, 1897)
- 27 Household Hints (UK-Girl's Own Paper, 1899)
- 28 The Brook and Its Banks, Part 3, by Rev. J.G. Wood (UK-Girl's Own Paper, 1886)
- 31 Table Etiquette: The Etiquette of Small Things, by Mary Barr Munroe (US-Good Housekeeping, 1889)
- 32 Poem: "The Old Fireplace" (US-Omaha World/Good Housekeeping, 1888)
- 33 Locomotives on the Line (UK-Cassell's Family Magazine, 1887)
- 35 Some Delicious Layer Cakes, by Annie Curd (US-Good Housekeeping, 1889)
- 36 Janitors I Have Met, and Some Others, Part 2, by Albert Bigelow Paine (US-Good Housekeeping, 1900)
- 39 Nothing but Sparrows and Blackbirds, by Alfred J. Bamford (UK-Cassell's Family Magazine, 1892)
- 42 On the "Underground," by F.M. Holmes (UK-Cassell's Family Magazine, 1893)
- 46 Toilette Table Decoration (UK-Cassell's Household Guide, 1884)
- 47 Light-Givers, by Mary Titcomb (US-Frank Leslie's Popular Monthly, 1895)
- 58 Poem: "Purrings," by M.E.W. (US-Good Housekeeping, 1888)
- 59 Poem: "A Cheering Outlook for the Editor," by Charlotte W. Thurston (US-Century Magazine, 1892)
- 59 Little-Known Fruits and Vegetables, by Dora de Blaquière (UK-Girl's Own Paper, 1894)
- 64 Zig-Zags at the Zoo: 14 ZigZag Corvine, by Arthur Morrison & J.A. Shepherd (UK-The Strand, 1893)
- 73 Recipes: The Art of Cooking Apples/Some Sweet Potato Dainties (US-Good Housekeeping, 1887)









Is a Picture Worth a Thousand Words?

You've probably heard that "a picture is worth a thousand words." Ironically, that saying isn't so old; it is attributed to an advertising firm in 1921, the point being that you can sell more to people using pictures than just using words.

Early Victorian magazines didn't have the luxury of getting a point across through images. Before the 1860's, many had no illustrations at all, or else a few (often very poor) prints. By the 1860's, it was just becoming possible to incorporate an illustration on the same page as text. Color prints were still a ways off, which is why the lovely fashion prints in magazines like *Godey's* were colored by hand.

Even after illustration become more economical, some magazines, according to Mrs. Frank Leslie (who managed a vast American publishing empire) regarded illustrations as something for children, not adults. Her husband was a pioneer in the development of economical engravings. By the 1870's, most magazines were packed with illustrations, and full-color prints were also becoming common. These prints ended up on thousands of household walls; for the first time, colorful "art" was available to everyone, not just the wealthy. (I got a chuckle from an 1880's article that in which the author mentions framing a particular *Girl's Own Paper* print for her wall; I use that same print for my mousepad!)

Despite this new ability to incorporate artwork and illustrations, however, the focus in the 19th century (and well into the 20th) was still on *words*. Pictures served to *support* the words, not replace them. And some, like *The Atlantic Monthly* still didn't use them at all, which is why our feature on Colorado in this issue does such a remarkable job of enabling you, the reader, to paint full-color images in your head.

Today, we've swung in the opposite direction. Many magazines use words to explain the pictures, not the other way around. Many are designed to be flipped through rather than "read." Our brains process images as much as 60,000 times faster than text. We process pictures "whole" rather than in a linear fashion, like text. We use different areas of the brain to process and store pictures, and we remember them longer.

But this isn't necessarily a good thing. The "problem" with words is that you have to *think* about them. You actually have to *consciously* process them. When you deal with words, you have to take them bit by bit, analyze them, examine them, accept them or reject them—in short, you have to *think* about them, and that means you can make *choices* about how you respond to them. If you can "process" a picture 60,000 times faster than text, that means your mind has no time to actually *think* about the image at all. It is received and embedded before you can analyze it, or choose to accept or reject its message. It's already in your head, and it's darned difficult to get it out again, *or* to change your initial emotional response to it. That's why advertisers love pictures!

Pictures are great. I love pictures. I grew up with magazines like *Arizona Highways*; we didn't live in Arizona, we just loved the pictures. But I also grew up with words, and I firmly believe these are what made me a writer and an editor. A picture may be worth 1000 words, but when it comes to the influences we allow to shape our lives, words give us a chance to choose who we are, what we think, and what we will become. Perhaps, 1000 words are worth more, in the long run, than 1000 pictures!

—Moira Allen, Editor editors@victorianvoices.net



THE "SORTING" OF PAUPERS.

By EDITH SELLERS.

With Illustrations by R. CATTERSON-SMITH.



N the eyes of the law, in Draco's day, all men were either black or white, criminals too vile to live, or paragons of righteous dealing. It was not until comparatively modern days, that legislators awoke to the fact that there is such a thing as moral greyness; that, for example, the hungry man who steals a loaf of bread is not quite on a par with him who commits a murder. Criminals, however, have little now to complain of; it is only paupers, in this our day, who are all clubbed together, all judged black alike. In English workhouses, honorary distinctions are things unknown; there young

girls and old women, loafers and dotards, men who won't work and men who can't, they who have drifted from prison to prison, and they who have fought hard to keep the wolf from the door, all stand on the same level, lead the same life, eat the same food, and, as far as the limits of possibility, are subjected to the same treatment. Our poor-law system recognizes no arconstances attenuantes when poverty is the

crime; it simply metes out even-handed justice all round.

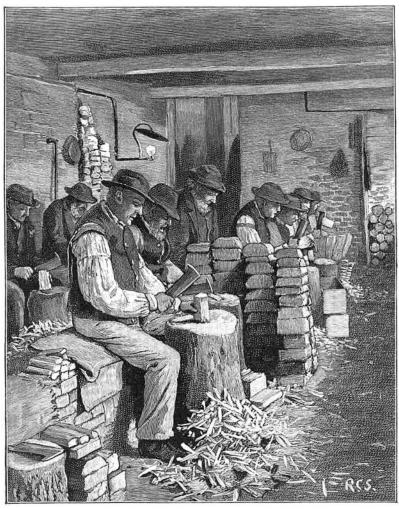
In a Midland county there is a certain workhouse of which its managers are inordinately proud; and with reason, too, for in its way it is a perfect model. The house itself is thoroughly well built; the rooms are large and lofty; and all the arrangements with regard to heating and ventilation are upon the most approved From an æsthetic point of view the place is certainly hideous, with that square, barnlike ugliness which is so terribly oppressive; but then beauty of structure can hardly yet be regarded as a sine quá non for a workhouse. Inside and out it gleams with cleanliness. The windows—there are rows and rows of them all just alike—are simply appalling in their brilliancy; and so are the long white walls which seem to catch each ray of sunlight as it falls and give to it an almost cruel intensity. The gowns and caps of the women are without spot or blemish, and on all sides are neatness and order. Everything goes as if it were upon wheels; "there's a bell for this and a bell for that"; and all the meals are served to the minute. Each pauper there is well housed, well tended, and moderately well fed; what can he wish for more? Casual visitors are puzzled to account for the air of profound depression that pervades the place; and for the helpless, hopeless despondency which is written on every face they meet. The children, as they trudge along, walk sedately by twos and twos, as if they knew by instinct, that running and laughing and suchlike sports were never intended for little paupers. Even the babies wear an expression of preternatural gravity; whilst, as for the faces of the women. . . . Is there anything on earth more pathetic than the faces of pauper women, as they sit together in an afternoon, in those bare white rooms of theirs, just waiting for time to pass? Gentle-spoken, kindly beings some of them; others the veriest old hags a doss-house ever harboured; yet all equally wretched, all people who have nothing to do in the world, whom nobody wants. Amongst the men, the misery is more active if not more intense. An old

farmer, whom bad harvests have ruined, shrinks away with sullen indignation from the ex-jail bird who works by his side. The ne'er-do-well who, in his time, has spent thousands, scoffs and gibes at the workman, who could always have counted his earnings on his fingers. The only bond of union amongst the lot is their utter hopelessness; the knowledge that sticks will always be there to be chopped, and that they will have to chop them—at least until that day comes when they will be left, each one in his turn, to gaze at that long dazzling white dormitory wall, waiting for the end.

This is a model workhouse, one of the best of its kind, yet even here all who cross

its threshold, no matter whether old or young, no matter what their virtues or what their faults, are only paupers, just a class apart. This system has its advantages, no doubt, but it is hardly in accordance with the spirit of this philanthropic century of ours; and, as economists and humanitarians are at one in condemning it, and in pointing to hereditary pauperism as the outcome of its working, the time is at hand when it must yield place to some other arrangement. A method will have to be devised of discriminating between those whose poverty is the result of their own laziness or extravagance, and those whose misfortunes are due to no faults of their own; between the irredeemable, and the boys and girls who are still young enough to be turned into useful citizens.

It will not be the first time that an attempt has been made in England to



A WOOD-CHOPPING ROOM.

"sort" paupers. Some of our ancestors were miles in advance of us in their views as to the treatment of the poor; and, oddly enough, whilst legislation with regard to criminals has, during the last three centuries, tended towards a more and more careful apportioning of punishment to merit, with regard to paupers, it has moved in a diametrically opposite direction. As early as 1388 a statute was passed in which a sharp distinction is drawn between "the impotent and the valiant beggars." The rich are exhorted to give alms to the former, but to hand the latter over for "whippinge and brandinge." In 1549, it was specially enacted that the sick and aged should be tenderly dealt with; and four years later, Sir Richard Dobs, the then Lord Mayor, Bishop Ridley, and a committee of notable citizens, drew up a most elaborate document setting forth the various "degrees of the poore." The object of their classification was to insure each pauper's receiving the precise treatment he merited. Not content with dividing the poor into three classes, "Poore by impotencie, Poore by casualtie, and thriftless Poore," this committee subdivided each class into three sections. Thus "the fatherlesse poore man's child, the aged blind and lame, and the diseased person by leprosie," are all poore by impotencie; "the wounded soldier, the decaied householder, and the visited by greevous disease," are poore by casualtie; whilst "the rioter that consumeth all,

the vagabond that will abide in no place, and the idle person," all come under the heading of the "thriftless poore."

These sixteenth century poor-law reformers had faith evidently in the sorting process; and, as soon as they had enunciated their theories, they set to work to reduce



TYPES WORKING SIDE BY SIDE.

to practice. They bought them Grey Friars Monastery, and fitted it up as a school for the "fatherlesse poore man's child." They turned St. turned St. Thomas's Hospital into a home for the blind, the lame, and the diseased; and they arranged that each parish should provide, at the expense of the community, convenient cottages for the aged destitute to live in. Nor did the committee restrict their help to "the poore by impotencie;" its members did what they could too for "the poore by casualtie." A quaint little letter is still extant written by Bishop Ridley to Master Cecil, to induce him to use his influence with the King and Council, that the royal palace of Bridewell might be given as a home for those who were willing to work, but could find no work to do. The Bishop also suggests that the land attached to the palace should be made into what we should now call a labour colony. From first to last in the account of the proceeding of this committee, there is, however,

no mention of anything being done to help "the thriftless poore;" for them, evidently, "whippinge and brandinge" was held to be the right treatment. With all their anomalies, their absurdities, and their extravagance, there is many a useful lesson, on the subject of dealing with paupers, to be learnt by studying the

records of our old civic charities.

Several continental cities have, during the last few years, made fairly successful experiments in the art of sorting paupers; and some of them have already, in full working order, systems by which the help he or she deserves is, roughly speaking, secured for each destitute member of their population. It is the custom in these places to refuse to regard as paupers, in the English meaning of the term, the very old, the very young, cripples, or invalids. All these are placed in a class to themselves, and are never brought in contact, directly or indirectly, with regular paupers. They are the unfortunate for whom their more lucky fellow-citizens are bound to provide; and, in justice to these latter, it must be stated that, as a rule, they do provide for them most ungrudgingly. The children are boarded out, or sent to orphanages, whilst special



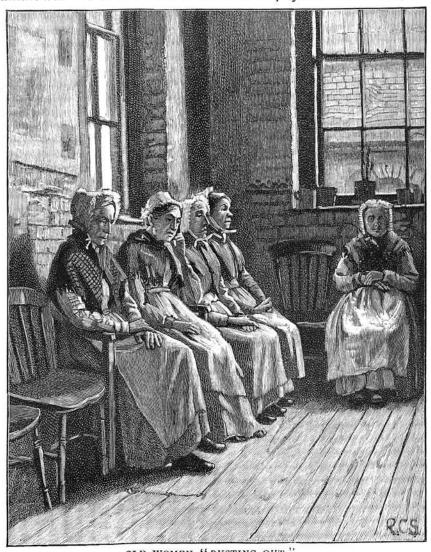
" ASSOCIATES."

arrangements are made for the aged poor and the weak. This is notably the case in Austria, where at sixty-five—or at sixty if in feeble health—every man has the right to claim admittance, not as with us to a workhouse, but to a comfortable home, where he is supplied with food, clothing, and all the necessaries of life, or is given a small pension wherewith to provide them for himself. In illness he is nursed skilfully and tenderly; in health he is well cared for and treated with kindly consideration; for every effort is made to render life pleasant in these homes set apart for the aged. No

pauper, however, is allowed to cross their threshold, for there a pauper is an able-bodied man-or woman-and such an one, although he may be helped, providing he be willing to help himself, must certainly not be coddled.

There is something decidedly refreshing in the wholesome sternness of the continental authorities, who have adopted the so-called Elberfeld system, in their dealings with professional loafers. They will not tolerate them, will not in fact allow that they have any right whatever to exist; the consequence is that, in many towns, a "permanent pauper" is a thing unknown. If a man cannot work from physical weakness, he

is sent to a hospital or a convalescent home; if he will not work, he is treated as a criminal. A pauper's willingness to do an honest day's work is the standard by which poor-law officials measure his worth. Vienna paupers-viz., the able-bodied destitute—are divided into three distinct classes, each class having assigned to it separate abode. man, if suddenly reduced to want, may, whilst he seeks for work, go to a refuge which corresponds roughly to our casual ward. In these refuges, however, all the arrangements are made with a view to helping the man who goes there to find employment; whilst in our casual wards, they seem to have been devised for the special purpose of preventing his doing so. Vienna, his breakfast is given to him at five o'clock in the morning,



OLD WOMEN "RUSTING OUT."

and there is always an official at hand to hurry him out to look for work, and to tell him where he is most likely to find it. In London he must pass the best hours of the day in the casual ward breaking stones, chopping wood, or in some other way working out the cost of what has been given to him. The result of this arrangement is that, when at last he is released, it is too late; every post he would have had a chance of obtaining has been filled up hours before. is the way we manufacture permanent paupers. In Vienna things are managed on a different system. If a man there fails to find work in his first day's search, he may return to the refuge at night; he may even stay there several days in succession, always supposing the authorities are convinced he is doing his utmost to provide himself with employment. A sharp watch, however, is kept on his movements, and the moment he shows signs of a taste for loafing, the door of the refuge is closed on him for ever. If he still require help, he must go to the workhouse, where he must submit to a certain amount of discipline, and must work out the cost of the food and lodging with which he is supplied. An ordinarily industrious man, however, has no reason to

complain even in the workhouse. Providing he does his work, he is there infinitely better fed, better housed, and more humanely treated than he would be in most English unions. But no shirking of work is tolerated, and the first indication on his part of a desire to take life easily, or to prolong his visit unduly, meets with scant mercy. From the first he is given to understand, with unmistakable clearness, that although



STONE-BREAKER'S CELL.

Ten hundredweight of stones to be broken in a day and put through the lattice window. For this the casual gets twenty ounces of bread, an ounce and a half of cheese, two basins of gruel, and a straw bed.

the town is prepared to give food and shelter to the weak and helpless, it expects the able-bodied to provide these things for themselves. Still, in the workhouse as in the refuges, men who are really trying to make a fresh start in life, always meet with encouragement and kindly aid. The authorities are in touch with the employers of labour, and take care to provide the paupers with opportunities of finding work.

All the world over, a certain proportion of the men who appeal to their fellows for help belong to the irredeemable class, the drunken, the vicious, the hopelessly lazy; and it is in dealing with these that the Austrian system is specially successful. As a rule, persons of this sort present themselves first at a refuge, where however their stay is very limited. They then pass on to a workhouse, where, if they are exceptionally lucky, they may succeed in disguising their real character for a week, or a fortnight perhaps at most. of their worthlessness, or laziness-the two terms are regarded as synonymousis always forthcoming before long, and then they are straightway packed off to a penal colony, where the length of their visit depends upon their conduct, not their wishes.

The working classes in Austria have a code of ethics of their own with regard to paupers. A man may go to a casual ward without subjecting himself to any reproach whatsoever; he may stay in a workhouse even, and leave it without a stain upon his character; but, if he once be sent to a penal colony, he is regarded as a criminal, as the enemy of his kind. In England, unfortunately, public sentiment is less educated; and no one dreams of distinguishing "the thriftless poore," or even "the rioter that consumeth all," from "the fatherlesse poore man's son," or "the decaied householder." They are all paupers, and paupers only.





A MONTH'S HOLIDAY IN LONDON FOR COUNTRY GIRLS.

I USED to think that London was only a place for the rich, and that those with small or even moderate means must not attempt a visit to town, for the very excellent reason that they could not possibly enjoy it unless their pockets were at least somewhat lined with gold.

One day, however, it fell to my lot to come up to London, and not only to come but to stay; and it was necessary that I should see the very most I could of every nook and corner, as well as follow the beaten tracks of the great Babylon, and that with a very small balance indeed at my bankers; so I set myself to work to keep within my limit of thirty-five shillings a week, dress and doctor's bills of course excepted.

Therefore if any girl is anxious to spend a holiday in London, let her put £8 in her pocket wrapped in a large bundle of common sense. At the end of four weeks she will return home, having on that sum, not including travelling expenses, seen, heard, and done as much as most British maidens, in the same time, if the will in her daily outings lend an ear to my hints.

Weekly Expense.-As a foundation to my hints let me say that it is quite possible, if you are strong and sensible, to spend a holiday in London, and do a surprising amount on forty shillings a week each person; indeed for thirty-five, if very prudent. Forty however is a good foundation. This sum does not include dress, travelling nor doctor's bills, but just living and all daily incidental expenses. Of course thoughtless extravagant folk can soon come to the end of even a very long purse, but for those who are willing "to fit things in," to be prudent on some days, that on others they may be a little lavish, it is wonderful what can be done on that amount. If two relatives or friends come together it is better, as there are many small expenses that can be shared, besides the advantage of greater independence in evening outings.

Where and how to Live is a question of importance, and my answer is, board by all means if you want to see London thoroughly and cheaply.

The prejudice against that mode of living is dying out, but there are many benefits to be derived from so doing. You pay a stated sum each week for instance, and know that you will not be met with unexpected demands, as is the case sometimes, when you pay your weekly bill in apartments; then again coming in touch with people of different pursuits and tastes, you hear of places, things, and people

to be seen and heard, which otherwise might remain unknown to you for ever; besides, those with whom you come in contact thus are often able to show very practical kindness to strangers by obtaining for them orders perhaps or tickets of admission to places closed to the general public, and in various ways there are more advantages in boarding than in furnished apartments. It is well always to let people know what you are anxious to see; and always study your guide-book.

One of the most convenient parts of London for the general sight-seer is that just south of the Euston Road stretching from Gower Street to Upper Woburn Place; the situation is healthy, the houses large, omnibuses to almost every part of London, underground, and railway stations all close at hand; many of the concert-rooms are on the direct omnibus route, and best of all, reliable, inexpensive boarding-houses are to be found there, where one may be most comfortable, and where even one's most fashionable friends can call. It is quite possible to get a small room in a well-recommended house for twenty-five shillings a week inclusive. That leaves fifteen shillings out of the forty for other expenses.

How to do it.—With that fifteen shillings a week you can see much, and this is how to set about doing it. If you have a London Baedeker, bring it with you; if not, at once on arriving spend a shilling on London for the current year by Herbert Fry, a capital book which will tell you everything you want to know relative to London and its sights. Also take a morning paper; that will cost sixpence a week, or threepence each if there are two. Always look through it carefully before setting out for the day, particularly under headings such as "Arrangements for the Day" and "London Day by Day," also the front sheet where concerts, lectures, recitations, exhibitions are all advertised. In this way you see what is going on and can map out your day accordingly.

Always consult your guide-book as to the free days at the museums, picture-galleries, and Abbey; in fact, look up any place you think of going to. Sixpence is a consideration, and must be thought of if you want to see much for little. No place is so crowded on free days as to make it really disagreeable; and in no place is the trite little admonition "take care of the pennies" more necessary than in London.

Getting About.—Underground for long distances is the quickest; but one can be more economical if using omnibuses, and from the top of the latter London can be seen better than in any other way, nothing excepted. Learn as soon as possible to know the omnibus routes, and also the penny-fare districts, as that is one of the small ways in which you save a good deal. For instance, in going from Gower Street, let us say, to the Royal Academy, by walking to the Tottenham Court Road and taking an omnibus there, instead of in the Euston Road, paying a penny fare, alighting at Piccadilly Circus, and walking the remaining short distance to the Academy, you save two pennies and have only a short walk at either end. A couple of pennies a day mount up to about five shillings a month, which would pay for two extra outings.

Dress Hints.—A good black skirt of satin, crèpon, or whatever may be worn is indispensable, also one well-made evening blouse in case of being taken by friends to the stalls or elsewhere where evening dress is required, a couple of pretty silk ones for concerts and dinner at home, a small toque also for concerts, as large hats are most unfair to those who sit behind, and a pocket bottle of salts and a pocket fan add greatly to one's comfort everywhere. Also a long, rather dark operacloak is useful, as then, whether in evening-dress or not, you can use the underground or omnibus.

Always wear dark gloves in the street (light ones soil in two wearings), also dark petticoats; both, of course, excepted on special occasions.

Don't give a penny to everyone who asks for one in the street or tries to sell you something.

Never carry much money in your purse.
Lunch at home if possible, if not, at the
Aerated Bread Company or some such shop.
For any information when out of the house.

For any information when out of the house, ask policemen, postmen, or some one in official dress.

Girls quietly behaved and quietly dressed can go to concerts and lectures in the evening by themselves and return by omnibus (numbers of which wait near almost all places or entertainment) in perfect safety. Hundreds of girls do it every night with no discomfort whatever; in fact, the London public thoroughfares, which are well-lighted and where there are numbers of police, to those behaving like ladies, are as safe as in a drawing-room.

Lastly.—Try a holiday in London even on

Lastly.—Try a holiday in London even on thirty-five shillings a week rather than not at all, and, if you are the right sort of girl, you will never regret it.

I. K. M.

A SYMPHONY IN YELLOW AND RED.

WE owe a great debt to Mr. Whistler for having reclaimed the good word "symphony" from the arbitrary monopoly of music writers. At first we wondered at the daring reprisal; but presently the right of it became so plain that we only wondered no man had done it before.

Henceforth they who make harmonies for the eye will hold the word fraternally in common with those who make harmonies for the ear, and no just person can call it an affectation. And he also who seeks to render in words, as others in music or color, some one of nature's gracious harmonies which has greatly delighted him, will do it all the better by the help of this good word in the beginning. Except for it, I think I should have never believed it possible to tell what I am going to try to tell now. One day an artist in Colorado spoke to me of Mr. Whistler's Symphony in White.

"Ah," said I, "Colorado is a symphony in yellow and red." And as soon as I had said the words, the colors and the shapes in which I knew them seemed instantly to be arranged in my thought: places miles apart began to knit themselves together into a concerted and related succession; spots and tints I had only vaguely recognized became distinct and significant, each in its order and force; and more and more as I looked from the plains to the mountains and from the mountains to the plains, and stood in the great spaces crowded with gay and fantastic rocks, all the time bearing in mind this phrase, it grew to seem true and complete and inevitable.

I ought to say at the outset that in speaking of the coloring of Colorado, I speak only of the part of Colorado which I know thoroughly, the vicinity of the town of Colorado Springs, which lies seventy miles south of Denver, at the foot of Pike's Peak. There is a similar brilliance and variety of coloring in other

parts of the Territory, but I know them less.

"The eye paints best in the presence, the heart in the absence, of the loved object," said Bettina. To-day, as I sit on a New England hill-side and look westward, the pale blue bar of the horizon line seems a vista, rather than a barrier, and I see the Colorado plains lying beyond; see them as distinctly as if I were standing on their very edge, and counting the belts and bands of color which I know the fiery Colorado sun is at this very moment printing on their surface.

When I first saw them they were gray; blank, bald, pitiless gray, under a gray November sky. "A sea of gray ice!" I said to myself. "It is terrible." To the east and the south and the north they stretched, apparently endless; broken only by a few buttes rising as gray icebergs might, frozen fast in the gray sea. To the west, a mountain wall; mountains which looked like black adamant cystallized into immovable and giant shapes. Had I passed by then, and never seen those plains and mountains again, the picture would have lived in my memory always as the picture of a place fit for the old Scandinavian hell. I recall the scene now, as one recalls a vision from a nightmare dream. No darkest day ever produced it again. After I had once seen the plains aglow, nothing could make them anything but beautiful. We know no face till it smiles. If the smile is a true smile, the face is transfigured to us forever.

These plains are thick-covered with grasses: the buffalo grass, which grows in low tufts or mats, with a single tiny, dark, spear-shaft head on each stalk; and two or three other sorts which have fine feathery blossoms. These dry in wonderful colors, yellows and reds; the yellows shade up to scarlets, and the reds down to the darkest claret. There are also numerous weeds, whose tiny flowers dry on their stalks in the marvelous pre-

serving air of the plains. These too dry into yellow and berry-red. I especially remember one of these which eluded me for a long time. I had noticed, in my drives, spots of vivid red here and there on the ground at short distances from the road, but saw nothing to explain them. When I walked over the same ground I found only the usual grasses and indifferent-colored weeds. At last, one day, I saw a big patch of this color, half a rod long; when I reached the spot, I found myself walking over myriads of infinitesimal stems, not more than an inch or two from the ground, each holding at top a tiny dried calyx, bright red, the size of a pin's head. Singly or in small bunches they would hardly be seen, and yet I afterwards recognized that they made superb masses of color in many places. I carried a bunch of them home, but their color had gone out. In vain I set them in strong light on a window-sill; they would not be bright red any longer. They needed the free air of the plains, and the sun striking through.

There are no trees or bushes on these plains, except along the small and infrequent creek courses. Looking down from heights you trace the creeks from horizon to horizon, not by glistening lines of water, but merely by zigzag lines of deeper color; in the summer by lines of vivid green, in the winter by lines of dark red, pale yellow, and gray. The bare cotton-wood trees are gray; the willows, of which there are several varieties growing luxuriantly, are yellow and red: yellow as gold, and with the sheen of satin on their stems; red as wine, and taking the sun as flashingly. A little marsh filled with them, and lying in a hollow of the plain, makes, on a bright day, such a blaze of shaded and graduated color as I do not know elsewhere. When above these claret and yellow willow stems rises a copse of leafless cotton-woods, of soft, filmy gray, the whitest gray ever seen, the combination of color is at once so dainty and so vivid that one is amazed that so subtle an effect can last day after day. Yet there they stand, all through January, all through February, all through March, and through April,

well into May, a perpetual delight. These are the months in which the coloring of the plains is at its best. When spring fades the willows, covers the cotton-woods with light green leaves, and turns the plains to a pale olive-green, the landscape becomes tame in comparison with its winter hue. I have spent winter afternoons on the bluffs to the east of the town, looking down on the plains when they were yellow as wheat fields in August, of as even surface as a close shorn lawn, and with great belts and irregular spaces of paler or deeper yellow, berry-red, claret, and dark brown. Looking at these miles of shaded and blended colors one finds the worn-out simile of a carpet almost fresh in one's thought, because so inevitable. Then, when swiftly moving clouds make a play of shadows upon the carpet, it looks more like a sea. There is a peculiar tint of blue in all shadows in Colorado. When they are cast upon snow the effect is indescribably beautiful. A fantastic chariot in mazarine blue glides noiselessly by your side as you drive; a double in ghostly clothes of blue steel slips on ahead of you as you walk. These shifting blue shadows on the yellow plains give them a wonderful semblance to the sea under alternating sunlight and shade.

The northern horizon of this shining carpet, this sunlit sea, is a deep blue wall. This is the Divide, the tableland separating the Denver plains from ours. It is eight thousand feet high at its highest, and thickly grown with pines; but it looks simply like a solid bar of blue.

The western horizon is a mountain range, Pike's Peak, nearly fifteen thousand feet high, its central and culminating point, whose tints shall be fiery red, golden yellow, or deep purple blue, according as you see them: fiery red at dawn, yellow in the first flood of sunrise, and purple just after the sun has set. The southern and eastern horizons are sky or plain, you know not which. Whether the sky bends and droops, or the plain hollows and curves up to the tender, vanishing line in which both cease to be, you never know; and

your not knowing is the charm, the spell, under which you gaze and gaze into the immeasurable distance, until myriads of worlds seem to be coming and going just along the outer edge of this one. On a very clear day, two blue pyramids rise in the south, and a long, low, undulating line like blue mist is seen at their right. These are the Spanish Peaks, a hundred miles away, and the range is the Sangre di Cristo. What a strange audacity of reverence there seems in the way the Spaniard has set the name of his Christ everywhere! In the east, there are a few near buttes or bluffs. They also are yellow, darkened by low growths of pines and firs. They rise up like fortresses. Among them lie and wind labyrinthine valleys, - sheltered spots in which sheep-raisers find warm nooks for themselves and for their sheep at night. These buttes or bluffs are mainly of yellow sandstone; the growth of firs and low oaks is so thin that it does not hide the yellow tint, only makes a dark fretwork over it. Coming closer to them, you see that their sides are strangely rounded, and, as it were, hewn into projections like towers, bastions, parapets, arches, — ledges and chasms and toppled bowlders everywhere. No wonder the yellow plain looks like a sunlit sea, for not so very long ago, as the earth reckons her ages, it was a great lake, and these were the cliffs on its shores. Climbing up these bluffs, and wandering in their shady recesses, one thinks of Edom and Petræa. Strange shapes of yellow sandstone are standing or lying about in a confusion which is at once suggestive and bewildering. They are mostly rounded and grooved columns, of tapering and irregular forms, sometimes broken short off, but more often widening at the top into a broad cap, like an anvil. Many of them are of such grotesque shapes that at every turn they take new and fantastic semblances, seem to have leering or malicious faces, sometimes almost to be peering out and disappearing mockingly behind the trees. Their color is not a uniform yellow, but is of a variety of shades and tones, often deepening into orange or scarlet, often

shading up to nearly white at top, and then finished off with the anvil-like cap of dark brown, green, or red. ground is strewn with odd, round pebbles, large and small, of the same friable yellow stone. Many of them are broken open into equal halves, a round hollow in the centre of each, as if they were petrified husks of nuts. Many of them bear fantastic resemblances to birds or beasts. There was one well known for months to all frequenters of the bluffs; it was as comical a rooster as could have been molded out of clay. The gardener had put it on the top of a pile of stones, where two roads crossed, and it was a familiar landmark. At last, one day, a traveler carried it to the Colorado Springs Hotel, and showed it in triumph as a rare trophy. It was recognized at once.

"Why, that is the rooster from Austin's Bluffs."

"You cannot have that. It is private property. Mr. Austin's gardener put it on that pile of stones. You must carry it back."

Public opinion was too strong for the traveler to resist. The rooster was carried back and remounted on his pedestal; only, alas, to disappear again, in the grasp of some less honest visitor, who, I hope, may read this paragraph and blush to recollect how he "robbed" that "roost."

Twelve miles northward of Colorado Springs is a group of beautiful small valleys known as Monument Park, from the great number of these strange sandstone rocks. It is the liveliest of all lonely places. You drive over a grassy road in the middle of a narrow green meadow, the sides of which slope up like the sides of a trough, the narrow strip of meadow ending abruptly at the base of high yellow sandstone cliffs, covered with pines, firs, and low oak shrubs. There are frequent breaks in these cliffs, and passes through them; and so crowded are these passes and cliff-sides with the yellow stone columns, that it is not at all hard to fancy that these are figures winding in and out in a procession, mounting guard, lying down, sun-

ning themselves, leading or embracing each other. Perverse people with fancies of a realistic order have given names to many of these figures and groups: The Anvil, The Quaker Wedding, The Priest and Nun, The Pincushion, and so Photographers, still more perforth. verse, have persisted in photographing single rocks, or isolated groups, with neither background nor foreground. These are to be seen everywhere, labeled "Rocks in Monument Park," and are admirably calculated to repel people from going to what would appear to be some bare, outlying pinnacle of the universe, on which imps had played at making clay figures, with high stakes for the ugliest. A true picture of Monument Park would give a background of soft yellow and white sandstone cliffs, rounded, fluted, and grooved, with waving pines thick on the top and scattering down the sides, and the statue-like rocks half in and half out among the trees; and to make the picture perfect, it should be taken looking west, so that the green valley with its fantastic yellow side walls and statues should be shut across at the farther end by a high mountain range, dark blue against a shining sky. Then, one seeing the picture could get some faint notion of what these valleys in Monument Park are like.

The famous Garden of the Gods, for which everybody asks as soon as he enters Colorado, and which nine out of ten people see for the first time with a ludicrous sense of disappointment, is another of these strange, rock-crowded parks. Who is responsible for the inappropriate name Garden of the Gods, I do not know: one more signally unfitting could hardly have been chosen. Fortress of the Gods, or Tombs of the Giants, would be better.

This park lies only three miles from Colorado Springs, and its grand gateway is in full sight from every part of the town. Fancy two red sandstone rocks three hundred feet high, of irregular outline and surface, rising abruptly and perpendicularly like a wall, with a narrow passage-way between them. The rock on your right, as you enter from

the east, is of the deepest brick-red; the one on the left is paler, more of a fleshcolor. At their base is a thick growth of low oak bushes, vivid light green in summer, in winter a scarcely less vivid brown, for every leaf hangs on until April. These rocks are literally fretted full of holes and rifts: tiny round holes as smooth as if an auger had bored them; ghastly crevices and chasms smoothed and hollowed like sockets in gigantic skeletons. Thousands of swallows have nests in these, and at sunset it is a beautiful sight to see them circling high in the air, perching for a moment on the glittering red spires and pinnacles at top of the wall, and then swooping downward and disappearing suddenly where no aperture is to be seen, as if with their little bills they had cloven way for themselves into the solid rock. Within a few feet of the top of the highest spire on the right-hand rock is a small, diamond-shaped opening, a mullioned window, through which is always to be seen the same diamond-shaped bit of sky, bright blue or soft gray, or shadowy white if a cloud happens to pause so as to fill the space.

I once had the good fortune to see a white-breasted sparrow sit motionless for some minutes on a point of rock just above this window, when the sky was clear blue, and the rock vivid red in a blazing sunlight. Such a picture as that was, three hundred feet up in the air, one does not see more than once in a life-time. The sparrow's white breast looked like a tiny fleece of white cloud caught on the rock. Not till two dark wings suddenly opened out and bore the white fleece upward, did I know that it was a bird.

Passing through this majestic gateway you find yourself in the weirdest of places; your red road winds along over red ground thinly grass-grown, among low cedars, pines, and firs, and through a wild confusion of red rocks: rocks of every conceivable and inconceivable shape and size, from pebbles up to gigantic bowlders, from queer, grotesque little monstrosities, looking like seals, fishes, cats, or masks, up to colossal

monstrosities looking like elephants, like huge gargoyles, like giants, like sphinxes eighty feet high, all bright red, all motionless and silent, with a strange look of having been just stopped and held back in the very climax of some supernatural catastrophe. The stillness, the absence of living things, the preponderance of grotesque shapes, the expression of arrested action, give to the whole place, in spite of its glory of coloring, spite of the grandeur of its vistas ending in snow-covered peaks only six miles away, spite of its friendly and familiar cedars and pines, spite of an occasional fragrance of clematis or smile of a daisy or twitter of a sparrow, spite of all these, a certain uncannyness of atmosphere which is at first oppressive. I doubt if one ever loved the Garden of the Gods at first sight. One must feel his way to its beauty and rareness, must learn it like a new language; even if one has known nature's tongues well, he will be a helpless foreigner here. I have fancied that its speech was to the speech of ordinary nature what the Romany is among the dialects of the civilized, fierce, wild, free, defiantly tender; and I believe no son of the Romany folk has ever lived long among the world's people without drooping and pining.

A mile to the north of the Garden of the Gods is a very beautiful little park, walled in by high hills and sandstone rocks of many colors, red, pink, yellow, and pale gray, stained dark green and brown and red in markings so fantastic and capricious, it seems impossible that they are not painted. The outlet from this little nook to the north is a narrow canyon, little more than a cleft in the rocks. A snow-fed brook runs down through this canyon and zigzags through the little park, making it a luxuriant garden of cotton-wood trees, shrubs, and vines, and all manner of flowers. The rocks here are so towering and grand that except for the relief of their brilliant hues, and the tender leafing and flowering things around them, they would be overawing. There are single shafts like obelisks or minarets, slender, pointed, one or two hundred feet high; huge slabs laid tier upon tier like giant sarcophagi; fretted and turreted masses like abbeys fallen into ruin: and all these are red or pink or painted in mosaic tints of green and brown and black and yellow. This nook is called Glen Eyrie; in it there is a beautiful home, and the voices of little children are often heard high up on the rock walls, where they seem as contented and as safe as the goats which are their comrades.¹

I will describe but one more of these parks; I am told that there are scores of them all along the range of foot-hills running northward from Colorado Springs. I do not believe that among the scores is one to be found so beautiful as Blair Athol. I do not believe that in all the earth is a spot to be found more beautiful than Blair Athol, unless possibly it may be some of the wild flower-gardens nestled at the base of the dolomites in the Tyrol. Will there ever arise in Colorado a master to paint her rocks and mountains in the backgrounds of immortal pictures, as Titian painted the dolomites?

Blair Athol lies six miles to the northwest of Colorado Springs. Its name has a charm of sound which is not lessened when you know that the Scotchman who owns and named it added to his own name, Blair, the name of Athol, by reason of his love for house and lands of that name in Scotland. It is a spot fit for a clan and a chieftain. It lies lonely and still, biding its time. The road which leads into it is so grass-grown that it is hard to find. The spot where it turns off from the main highway is sure to be overlooked unless one keeps a close watch. It seems not to promise much, this rough, grass-grown track. It points toward foot-hills which are low and close-set, and more than usually bare. But in Colorado roads any minute's bend to right or left may give you a delicious surprise, a new peak, a far vista, a changed world. The Blair Athol road, taking a sudden curve to the left, shows you such a vista: a foreground of low oaks and pines, the hills

¹ This is the home of General William Palmer, President of the Denver and Rio Grande Railroad. falling away to right and left and revealing the mouth of a glen walled thickly across by high pines; through this solid wall of green, fantastic gleams of deep red and rose pink; rising above it, a spire or two of bright yellow; on the left hand, sharp ridges of dark, ironstained sandstone, green, gray, yellow, black; on the right hand, low, mound-shaped hills densely grown with pines and firs, the soil shining red below them.

As the road winds in, the rocks seem almost to wheel and separate, so many new vistas open between the pines, so many new rocks come in sight. A few steps farther, and the way seems suddenly barred by a huge mass of yellow rock; a broad light streams in from the left, the south; there lies open country. Close to the base of this yellow rock wall the road clings, still in shade of the pines, and turns an abrupt corner to the left. You are in the park. The yellow rock round which you have turned is its east wall; to the west it is walled with rocks, rose-color and white; to the north with high, conical, pine-grown hills; to the south with sharp, almost pyramidal hills and masses of detached and piled rocks, dark red and rose color. It is smooth as a meadow; its curves rise to the bases of the rocks gently and lingeringly. Groups of pines make wide fringed, circles of shade here and there; blue anemones, if it is a June day, dot the ground. A few rods farther there is a break in the eastern wall, and framed in this frame of yellow rock is a broad picture of the distant plains in bars of sunlight and shadow, gold and purple. This is the view on which must look the eastern and southern piazzas of the house when it is built, and to that end nature has left clear the slight eminence a little to the north of the centre of the park. No man building here could think of building elsewhere than on this rise, and it is surely an odd thing that not a pine has set foot in it; that they have grouped themselves all about it, with as exquisite a consideration as the king's head gardener could have shown.

Presently the road stops short on the brink of a ravine, in which once there must have been water, for it is full of vines and shrubs, a tangle of green. Because the ravine is not bridged, we turn to the right; there is just room to creep round the base of the west wall of red Turning this, lo, we are in anrock. other little park, wilder and more beautiful than the first. The ground is more broken, and there are thick copses of low oaks and pines. The red wall on this side is even stranger and more fantastic than on the other. It leans and topples, keeping all the while a general slant, northwest and southeast, which is, no doubt, to the geologist an important feature in its record. At its base, huge dark red and pale rose-colored bowlders are piled in confusion; its top is jagged; isolated peaks and projections on its sides seem to have been wrought and carven; one into a great stone chair, one into a canopied sounding-board. The stone is worn out in hollows and crevices into which you can thrust your arm up to the elbow. In these, generations of conies and squirrels have kept their "feast of the acorn," and left the shells behind. This wall is on your right; on the left, low mounds and hills, with groves of pines in front, pines so thick that you get only glimpses through them of the hills behind. Soon the road ceases, dies away as if the last traveler had been caught up, at this point, into the air. A delicious sense of being in the wilderness steals over you. Climbing up on one of the ridges of the righthand wall, you look down into the first park, and out across it to the plains. Seen from this height, the grouping of the pines seems even more marvelous than before. It is impossible to leave off wondering what law determined it, if a landscape instinct and a prophetic sense of unbuilt homes be in the very veins of Colorado pines. The outlook eastward from this ridge is grand. It is the one which the upper windows of the house will command: in the foreground the huge yellow rock, three hundred feet long, and from one to two hundred feet high; beyond this a line of bluffs, then an interval of undulating plains, then another line of bluffs, and then the true plains, far, soft, and blue, as if they were an outlying ocean in which the world was afloat.

Immediately below this ridge lies the exquisite little cup-like park, with its groups of pines. The rocks of its western wall, seen from this point, are not only dark red and pale rose: they show intricate markings of white and gray and yellow; the tints are as varied and beautifully combined as you would see in a bed of September asters. Underneath your feet the hollows of the rock are filled in and matted with dry pine needles; here and there, in a crevice, grows a tiny baby pine, and now and then gleams out a smooth white pebble cast up by some ancient wave, and wedged tight in the red sandstone.

As you climb higher and higher to the north, there are more rocks, more vistas, more pines and low oaks, a wilder and wilder confusion of bowlders. When you reach the summit, the whole northern horizon swings slowly into view, and completes the semicircle of plains by the dark blue belt of the Divide. At the very top of this pinnacle is an old pinetree, whose gnarled roots hold the great

bowlders in their clutch, as eagles hold prey. If the tree were to blow off, some one of the days when the wind blows ninety miles an hour in Colorado, it looks as if it must go whirling through the air with the rocks still tight in its talons. There seems no soil here, yet the kinnickinnick vines have spread shining mats of thick green all around the base of the tree. The green of these and the pine, the bright brown of the fallen cones, the shading and multiplying reds of the gigantic rocks, the yellow and blue of the far-off plains, the white and blue of the far-off sky, - all these crowd on the sight, as you sit on this crowning pinnacle of Blair Athol. The silence is absolute; but the color is so intense, so full of swift motion, change, and surprise, that it seems to be rhythmic like sound, and to fill the air fuller. It is the final chord of the symphony in yellow and red, and as, in the slow-falling twilight, it grows fainter and fainter, one recalls some of the vivid lines of America's one lyric poetess: -

> "I see the chasm yawning dread; I see the flaming arch o'erhead; I stake my life upon the red!"

H.H.



HAND-MADE BUTTONS.

THE linen buttons which we buy so cheaply and can sew on so quickly are, we persuade ourselves, a wonderful convenience and a great saving of time. I believe, however, if we counted up the number of times a button has to be replaced upon the same article, we should conclude that they are not, after all, so economical of time as they appear to be.





Fig. 1

The little metal frames upon which they are made seem to have a peculiar fancy for catching on wringers and mangles, and safe indeed we may consider ourselves when some of the material has not been wrenched away with the button, leaving us a hole to darn as well as a button to replace.

The old-fashioned buttons which our great-

grandmothers made had not this failing, for in my possession I have some pillow-cases, now frail after years of good service, upon which the original old-style buttons still remain, apparently as good as ever. These buttons are not tedious to make when you practise the work for a little while; and their cost is practically nothing, because they are generally made of small scraps of material,

usually consigned to the rag-bag.

The illustrations show how these buttons are made. The material used for the model was flannelette, which is nice and soft to learn upon. Cut two rounds of it exactly the size of a penny; gather one of them evenly round the edge, leaving a margin of less than a quarter of an inch beyond the gathering, and draw it in until the edges meet in the centre. Pull the material into a neat little round, and fasten off the thread. Repeat the process with the second round, but do not break the thread. Place the two pieces together with the gathers inside; hold them between the thumb and forefinger of the left hand, and join them together the whole way round by button-holing them along the edges.

Linen buttons are made in much the same

manner, but the material being thinner the gathering should be pulled in closer, so that the margins may fill them up better, thus of course making the button somewhat smaller. Should the linen be of a light make, a little extra stuffing may be added by snipping up some small pieces of it, and slightly filling the two puckered up rounds; but it is a mistake to stuff them too much, or to make the buttons



very hard, as they are then troublesome to sew on, and, moreover, they do not wear so well.

Any ornamental work may be added to the upper side of the button, such as satin-stitch dots, if you wish it. When sewing on the buttons you should sew through them, as this prevents their being squeezed crooked in the wash. The buttons may be made larger or smaller, by cutting the rounds of different sizes.

BULGARIAN EMBROIDERY.

By JOSEPHA CRANE, Author of "Hungarian Embroidery," etc.

BULGARIAN EMBROIDERY has only quite lately made its appearance in this country, and those who liked the Hungarian work will,

and those who liked the Hungarian work win,
I think, be equally pleased with this.
Bulgarian work resembles Hungarian in
some particulars. The designs are very much
the same, and any good designs of the recognised kind as suitable for the work can be used indifferently for Hungarian and Bulgarian

It must be distinctly borne in mind that any pretty design which may take your fancy cannot be used for these embroideries if you wish them to retain their distinctive features. You may do very pretty work in them, but it will not be Bulgarian or Hungarian unless you get the proper patterns.

In these patterns there is a distinct family likeness. They are all conventional, and no attempt whatsoever is made to copy nature

excepting by suggestion of form.

Conventional roses, leaves, circles, scrolls, pomegranates, scallops, bars, all these appear more or less in the designs and all are bold and large. Small intricate patterns are useless and do not adapt themselves to the work at all well.

The material employed for Bulgarian work is much the same as that for Hungarian. It is never done upon dead white, but upon what is called *toile grosse*, which can be had at 5s. 6d. a yard, which sounds dear, until you learn that it is two yards wide. It is of a creamy white, the coarse threads being even and the whole well woven. A fine material does not do at all for these embroideries for two reasons. It will not bear the weight of the heavy embroidery, and as it pulls from it the latter looks very bad indeed. The second reason is that the cotton and silk being somewhat thick you cannot work with either if the threads are closely woven together.

You can do Bulgarian work upon this toile





TRACERY.

grosse, and also upon coloured linens; the latter can be had in blue, terra-cotta, etc., is fifty inches wide, and costs 4s. 6d. a yard. I have named the price of both, which can be procured at Messrs. Friedberger, 15, Wig-more Street, Cavendish Square, and where all

materials for this embroidery can be had.

Bulgarian work is done in cotton and silk. It is very seldom that more than three colours are used in any one piece of work, and these must be well chosen.

I will first of all describe the work done in cotton. The cotton is sold in balls; three sizes are kept, and the price is 9d. a ball, excepting the red, which is 10d. All the cottons wash well and so do the silks. The cotton is twisted, and not at all like coton à repriser.

The table centre which you see in illustration measures, exclusive of the lace, thirtyfration measures, exclusive of the lace, thinty four inches by twelve, and is one of Messrs. Friedberger's own designs. It looks extremely well when worked, and the cost of the stamped linen was very small. It will give my readers some idea of the inexpensiveness of the work when I tell them that after working it I had a good deal over from two balls, No. 20, of the cotton, which was in two beautiful shades of cobalt blue. The blue and white Russian lace which goes round it, and which is often used as a finish to Bulgarian which is often used as a finish to Bulgarian work, was 1s. 3d. a yard, and is two inches wide. The work goes wonderfully quickly, and those who like what is speedily executed will be charmed with it. This table-centre will wash again and again. As the stitches in this work are somewhat long, it is best suited for the decoration of articles that do not have to bear much or any friction. For example, it is suited to tea-cloths, table-centres, side-board scarfs, toilet-covers, curtain-borders. board scarfs, toilet-covers, curtain-borders,

nightdress-sachets, cosies, etc., etc.; but it would not be good for dresses, and only when done in cottons for cushions.

I will later on give directions for the working of the stitches, and illustrations of those used in the pieces of work given in this article. Some general hints, however, come in here.

Do not pull your cotton too tightly, and yet do not let it lie too loosely. Both are faults. Some use aiguilles à tapisserie with sharp

points; but I prefer simple needles with round eyes, and those of a very coarse size. I usually use No. 1 or No. 2. There is no padding anywhere.

The stitches used are satin-stitch, scallops,

stem-stitch, herring-bone, etc.

Sometimes the stitches are taken obliquely, sometimes straight. Of course you do not mix the two in one flower. For instance, the leaves that project from a flower, or the petals itself, must all be done slanting or all straight; but in a piece of work you can have a leaf that is by itself done in straight stitches, though the others may be slanting.

The tea-cloth is done in two shades of

terra-cotta cotton on toile grosse, the edge being simply fringed out.

The tea cosy is done in floss silk, a deep red, pale pink, and pale green being used. I have embroidered this on grey handspun linen, some of which I had by me and which I got at Harris's in New Bond Street. It is intended to be turned in all round the edging, and a ruche of red silk between the two sides. The silk is very beautiful; it resembles floss, and its brightness is thrown up by the dulness

of the coarse linen. Now for the stitches.

Fig. 1 is satin-stitch done in the silk, and, as you will see, the stitches are long and must

be close together.

Fig. 2 shows how the edge of the tea-cosy is done-long stitches taken quite straight

and close together.

Fig. 3 shows a kind of crossbar-filling, often used in this work. As you will see, it is only long stitches crossing each other and fastened down as you see in Fig. 5. Notice, please, that all the crossings go the same way; they look best done in a different colour to the bars. In Fig. 5 the pale pink is crossed with red; the red, by the way, is of a shade called grenat. To return to Fig. 3, the outline is done in stem-stitch, and though most people know how that is done I have left the needle in, in case some reader may not be amongst the learned. Keep your silk or cotton to the right, and when you have drawn the needle out put it in exactly opposite the last stitch, taking up only a little of the stuff and leaving about the same amount.

Fig. 4 shows how herringbone-stitch can

fill the edge of a circle.

Fig. 6 shows how bars are taken. Here they are done in double silk. Single silk or cotton answers well, but in large patterns I usually use it double.

Fig. 7 shows how the bars are fastened

down with a single back-stitch.

Fig. 8, a scallop. The stitches must be even and lie close together, for it is always a fault if any material can be seen through.

Fig. 9, a petal worked in satin-stitch. There are a great many of these in the blue table-

Fig. 10, a border. Four threads worked, and four left alternately. In this you must be guided by the thread. Easy as all this work is, it looks extremely bad if carelessly done, and if a border meant to be straight is not straight, or the edges of leaves, etc., are not kept clear and true.

Fig. 11 shows how the border in the table-centre is done. The upper row is dark and the lower light blue, not a thread of the ma-

terial showing between.

Fig. 12, a leaf with the stitches taken obliquely.



TABLE-CENTRE.

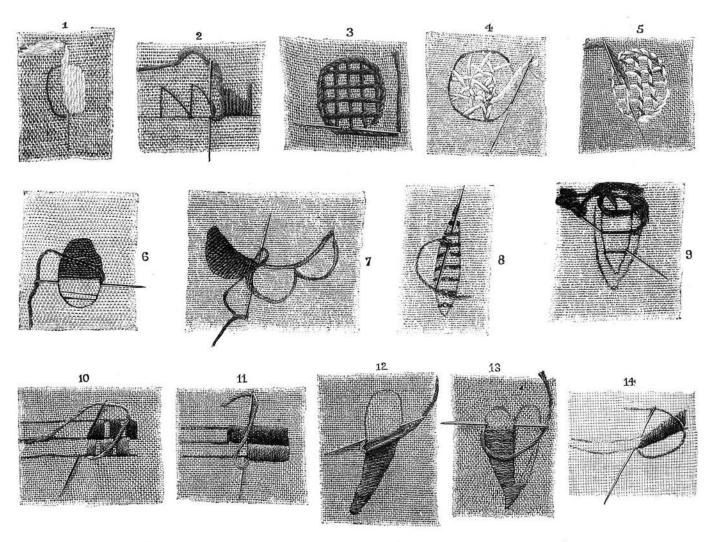


Fig. 13, a fancy leaf with stitches taken quite straight across. The second half is done like the first, the cotton meeting and no material to be seen.

Fig. 14 shows how the stem in table-centre is done. I feel sure that all readers will see for themselves how easy this work is, and how much fancy can be exercised while keeping to the design intended. In the tea-cosy, for example, there are variations on these stitches, and what is called a "spider" is used for centres. French knots are used in the teacloth, but these I have not given an illustration of as they are so well known; in the tea-cloth they are done in double cotton. The silk, I must tell you, is 1s. 4d. a reel, but it goes a long way.

Sometimes this Bulgarian work is finished off with hem-stitching, and fancy insertions done in coloured cotton or silk on the drawn



COOKERY RECIPES.

BUTTERED EGGS.

Ingredients.-Three eggs, one ounce of butter, pepper and salt.

Method.—Melt the bu

-Melt the butter in a small saucepan, beat the eggs with the pepper and salt, and stir them into the saucepan. Stir over the fire until set, and serve quickly on buttered

TO MAKE COFFEE.

Method, -- Allow twice as much coffee as tea to each person, heat the coffee-pot and put the coffee in the steamer. Pour in sufficient boiling water, and let it run through.

TO BLANCH PARSLEY.

Method .- Wash the parsley and pick off the stalks; dry it and chop slightly; put in a cloth and wring out under the tap, and then finish chopping.

RABBIT CROQUETTES.

Ingredients.—Quarter of a pound of cooked rabbit meat, two ounces of cooked bam, two ounces of button mushrooms, one gill of gravy, one ounce of flour, one ounce of butter, one teaspoonful of chopped parsley, pepper and salt, some crushed vermicelli, egg, deep fat for frying.

Method.—Mince the rabbit, ham and mushrooms finely and mix with the parsley, pepper and salt. Melt the butter in a small saucepan, stir in the flour and fry it a good dark brown; stir in the gravy and let it boil, add the rabbit, ham, mushrooms, and parsley well mixed and spread on a plate to get cold. Divide into equal portions and roll each into the shape of a cork; brush with egg and roll in crushed vermicelli, put in a fry basket and fry in deep fat a golden brown; drain well and dish in a pile. Garnish with fried parsley.

AMBER SNOW.

Ingredients .- One pound of apples, two ounces of butter, three ounces of loaf sugar, the rind of half a lemon, two eggs, two tablespoonfuls of sponge-cake crumbs, a few

strips of flaky pastry.

Method.—Pare, slice and core the apples and cook them to a pulp in a saucepan with the butter, sugar and grated lemon rind, rub this all through a hair sieve; line the sides of a pint pie-dish with the flaky pastry, separate the whites and yolks of the eggs and beat the yolks into the apple mixture, pour this into the pie-dish and bake in a moderate oven until Beat the whites to a stiff froth with two tablespoonfuls of castor sugar and a little lemon juice and heap on the top, return to the oven for a few minutes until it has taken a pale fawn colour. Serve hot or cold.

SOME LENTEN DISHES. How to Prepare Eggs and Codfish.



ENT is with us, and the many housewives who observe it are sorely tried to provide a variety and still keep within the rubrics. Eggs and fish are in demand, and if they are served each day in the same way, they grow very monotonous and complaints are entered long before the

season ends. To aid the housewife to vary her bill of fare, a number of well-tried, inexpensive and appetizing recipes for eggs and codfish is appended. A badly fried egg is an abomination, while if properly cooked it is much relished and presents a tempting appearance.

Egg Flowers.

Toast as many pieces of bread as there are persons, butter, dip an instant into boiling water, and place on a warm platter while the eggs are fried. Into an iron or steel skillet, put a tablespoonful of lard to get very hot. Break one egg carefully in a saucer and slip it into the smoking fat; when the white of egg is set, tip the skillet slightly and baste the egg with the hot grease until the yolk is covered with a thin white veil. Take up carefully on a cake turner and place on a piece of toast, salt and pepper. A dish of these well fried eggs resembles flowers and are more relished than if they were carelessly fried two or three at a time, which causes them to break and look ragged.

Most people consider an omelette first-class if it is puffed up and light; the ordinary American one is a tasteless, spongy affair, without even the recommendation of being sweet. A French omelette is anything but that. To add milk or separate the eggs is unpardonable and will spoil the best intentions. A real cordon bleu makes one in the following way:

Omelette, par excellence.

Put a tablespoonful of butter in an iron skillet to heat slowly, break four eggs in a bowl, add pepper and salt to taste and a tablespoonful of chopped parsley or minced onion. Stir until the eggs are well mixed, but do not beat. When the butter is hot, pour them in and stir constantly with a fork, till the eggs begin to set, gently tipping the skillet, to let the uncooked part run where it will be done through. With a broad knife commence to roll the omelette before the eggs get too set. The fire should be brisk enough to brown the bottom and make a nice roll, brown outside and juicy within. It takes some little practice to do it properly, but do not let one or two or even three failures discourage you, for the knack is easily learned and the result a perfect omelette.

Never attempt to cook more than six eggs at a time. Four is the safest number to handle and two or three well made omelettes look and taste decidedly better than one large failure of eight or ten eggs. This recipe may form the foundation of a great variety of omelettes made with no expense or loss of time. Instead of onions or parsley, a tablespoonful of grated

cheese, or one of minced ham, chopped green pepper, or even a pinch of curry powder, will add a delicious flavor and convert a plain dish into a French, savory one.

Hard Bolled Eggs, Cream Sauce.

Put on to boil in cold water, the number of eggs desired and cook twenty-five or thirty minutes. Drain and put into cold water again, to enable the shell to come off without sticking. After the shell is removed, place in hot water until the sauce is ready, otherwise they will be tough and indigestible. To one tablespoonful of butter add a heaping one of flour; mix well in a skillet, but do not let it brown. Add slowly one pint of milk, and cook till it tastes done, stirring well to smooth. Add pepper and salt to taste, and some chopped parsley. Drain the water from the eggs, and cut in halves lengthwise on a hot platter. If the sauce is lumpy, strain and pour over the eggs.

Boiled Eggs.

These as well as the fried, can be spoiled in the cooking, but if they are put to cook in cold water and taken out as soon as the water boils, they will suit the most fastidious egg eater. Serve in hot glasses or cups as a boiled egg is easily chilled and rendered unfit for any stomach.

Baked Eggs.

Butter well a round tin or porcelain pudding dish, and break into it carefully a number of eggs. Season with pepper and salt, spread with bread crumbs and bits of butter and bake in the oven till the whites are set. Serve immediately.

Scrambled Eggs.

Make the same as omelette, only breaking the eggs well with a fork, instead of rolling. Serve on hot buttered toass on a warm platter. Never add milk.

These recipes are all simple, easily made, and require no expensive extras to make them palatable. They will be tried by the economical and busy housewife. Two excellent recipes will be added for making the homely codfish really delicious. The following recipe for codfish balls was given by an eccentric old maid, and is made public for the benefit of readers of GOOD HOUSEKEEPING.

Secrets.

Boil together one pint of picked, unsoaked codfish, and one pint of raw potatoes. Cook till the fish is ragged and the potatoes are soft, changing water twice while cooking Drain off the water, mash well, add a large tablespoonful of butter, one of milk and beat until cool, then add two eggs, some pepper (no salt), and enough bread crumbs to shape into very soft balls. Fry in smoking hot fat.

Cream of Cod.

Soak over night, one pound of codfish. In the morning, cover it with boiling water and move to a part of the range, where it will simmer, but not boil, until tender. Boiling makes it tough. When done, drain, place on hot platter and cover with a cream sauce to which has been added a chopped, hard boiled egg. Capers, or minced mushrooms, may be substituted for the egg, but add to the expense.

-Dorinda Paul.



EVERY-DAY DESSERTS-PART X.

AND DESSERTS FOR EVERY DAY.

FRIDAY, MARCH I.

Lemon Pie-Pudding.

Take one-half of a pound of butter, one-half of a pound of sugar creamed together, juice of two lemons, the grated rind of one, five eggs beaten stiff. Bake in deep shell of pastry.

SATURDAY, MARCH 2.

White Puffs.

Three and one-half cupfuls of flour, three cupfuls of milk, whites of three eggs, one tablespoonful of powdered sugar, two teaspoonfuls of baking powder. Bake in cups, sauce 7.

SUNDAY, MARCH 3.

Jam Pancakes.

Stir the yolks of two eggs in one pint of warm milk, with onehalf of a tablespoonful of melted butter, and one-half of a teaspoonful of salt, flour for thin batter with two teaspoonfuls of baking powder and the whites of two eggs beaten stiff. Bake on a griddle and serve spread with jam and rolled up. Sprinkle with powdered sugar; eat with sauce 3.

MONDAY, MARCH 4.

Chocolate Meringue.

One quart of scalded milk, one-fourth of a cake of chocolate melted, yolks of six eggs, beaten stiff, six tablespoonfuls of powdered sugar. Bake in cups and spread with meringue.

TUESDAY, MARCH 5.

Duke's Fudding.

Make pastry of eight ounces of flour, six ounces of currants, six ounces of finely chopped suet, and a little water. Line mould and pour in four ounces of loaf-sugar, juice of two lemons, the grated rind of one, five eggs beaten stiff. Boil and eat with sauce 7.

WEDNESDAY, MARCH 6.

Maple Wax (delicious).

Make thick maple syrup, by boiling maple sugar, broken, in a little water, drop on snow to test it and, when it hardens, spread over saucers of closely packed snow.

THURSDAY, MARCH 7.

Bread Raisin Pudding.

Stir together and bake, one quart of milk, two cupfuls of breadcrumbs, four eggs beaten stiff, two tablespoonfuls of melted butter, one cupful of sugar, and one cupful of raisins. Sauce 9.

FRIDAY, MARCH &

Apple Custard Ple.

Bake, in shell of pastry, custard of one-half of a pint milk, onehalf of a pint of sweet apple sauce, two eggs, vanilla.

SATURDAY, MARCH 9.

Buns Cake (delightful.)

Make cake as in No. 259, spread between layers, mixture of icing as in C but, add one teacupful of seeded and chopped raisins, one-half of a cupful of chopped citron, juice of one lemon, one tablespoonful of brandy, one-fourth of a pound of blanched almonds chopped. Spread top with plain icing.

SUNDAY, MARCH 10.

Baked Batter Pudding.

One pint of milk, four eggs beaten stiff two cupfuls of flour, one teaspoonful of salt, one teaspoonful of baking powder. Bake and eat with sauce 3.

MONDAY, MARCH II.

Strawberry Tarts (good.)

Fill tart shells, when baked, with strawberry preserves (or canned strawberries boiled down with sugar added) cover with icing. (Recipe C is best for icing) and brown.

Pattypan Puddings. Scald one quart of milk with butter the size of an egg. When cool add the yolks of four eggs beaten stiff, one-half of a teaspoonful of salt, one pint of flour. When cold, add the whites of four eggs beaten stiff. Bake in pattypans. Sauce 5.

WEDNESDAY, MARCH 13.

Cocoanut Loaf.

One and one-half cupfuls of sugar, one-half of a cupful of butter, one-half of a cupful of milk, two cupfuls of flour, whites of four

eggs beaten stiff, one and one-half teaspoonfuls of baking powder, one cupful of grated cocoanut. Bake in a loaf, and eat with sauce 8.

THURSDAY, MARCH 14. Orange Jelly.

One-half of a box of gelatine, juice of three oranges, juice of onehalf of a lemon, three-fourths of a cupful of sugar, three-fourths of a pint of boiling water. Dissolve the gelatine in cold water and add to the rest and strain.

FRIDAY, MARCH 15. Sweet Biscuit.

Roll out biscuit dough (Recipe 2,) and spread with mixture of one cupful of sugar, one-half of a cupful of melted butter, one cupful of mixed, seeded raisins chopped, and chopped citron. Roll up, cut in slices and bake.

SATURDAY, MARCH 16.

Baked Apples and Jelly.

Bake cored, tart apples, with sugar in the core of each, and one cupful of water in the pan. Fill up when cold, the hole in each with crabapple jelly. Eat with whipped cream (Recipe A).

SUNDAY, MARCH 17.

Fritters. One pint of milk, two teacupfuls of flour, three eggs, two teaspoonfuls of baking powder, one saltspoonful of salt. Fry in deep lard. Eat with maple syrup.

MONDAY, MARCH 18.

Rice Pudding.

Soak one-half of a cupful of rice, two hours in one cupful of water. Add to one and one-half pints of milk, the yolks of three eggs, two tablespoonfuls of sugar, one-half of a cupful of raisins, and bake, stirring occasionally, adding one large tablespoonful of butter, when nearly stiff and brown.

TUESDAY, MARCH 19.

Fig Pudding(good.)

One and one-fourth cupfuls of sugar, one-half of a cupful of butter, one-half of a cupful of milk, two and one-half cupfuls of flour, one and one-half teaspoonfuls of baking powder, three eggs. Drop the dough in a cake tin, in alternate layers with sliced figs, top layer of dough. Bake and eat with sauce 7.

WEDNESDAY, MARCH 20.

Lemon Cheese Pattles.

Line pattypans with piecrust and fill with this mixture: Four eggs beaten stiff, three lemons, rind and juice, one pound of sugar, one-fourth of a pound of butter boiled together till thick. This recipe was given to me by a Chinaman, who, having taken lessons from a Frenchman, professed to be, and earned the wages of a French cook.

THURSDAY, MARCH 21. Apple Sponge.

Make cake as in Recipe 259, and spread between layers; juice of one-half of a lemon, three grated apples, one egg beaten stiff, one cupful, of sugar, butter the size of a walnut, a little nutmeg, all cooked thick in a vessel set in hot water.

FRIDAY, MARCH 22.

Impromptu Mince Ple (good.)

Bake, in two crusts, the following mixture: One beef's heart boiled tender, seasoned, and chopped fine, one pound of lightbrown sugar, twice the weight of meat in apples; add raisins, currants, citron, spices and brandy to taste. Of course, this mince meat will be more than enough for one lot of pies.

SATURDAY, MARCH 23.

Orange Cream Pudding.

Make in layers, cake of one cupful of sugar, one cupful of flour, three eggs, one tablespoonful of milk, three teaspoonfuls of baking powder. Spread between: One egg, one tablespoonful of cornstarch, two tablespoonfuls of butter, one cupful of boiling water, cook thick and add juice and rind of one orange. Ice top layer.

SUNDAY, MARCH 24.

Popovers.

One pint of milk, four eggs beaten stiff, little salt, two teaspoonfuls of melted butter, one teaspoonful of baking powder, flour for soft batter. Bake in cupfuls. Sauce 3.

MONDAY, MARCH 25.

Cornmeal Fruit Pudding(good.)

One and one-half pints of scalded milk, one-half of a cupful of

cornmeal, one-half of a cupful of flour, three eggs, one-half cupful of sugar, one tablespoonful of melted butter, one cupful of raisins, one saltspoonful of salt, one and one-half teaspoonfuls of baking powder, pinch of cinnamon and mace. Bake and eat with sauce 9.

TUESDAY, MARCH 26.

Jam and Snow.

Fill the dish three-fourths full of jam. Boil one pint of milk and one-fourth of a cupful of sugar, and two (smooth) tablespoonfuls of corn-starch. When thick add the whites of two eggs beaten stiff. When cool, pour over jam. Sauce 10.

WEDNESDAY, MARCH 27.

Queen's Pudding.

One-half of a pound of sugar, five and one-half tablespoonfuls of butter, one-half of a pound of flour, four eggs, one teaspoonful of baking powder, one-half of a pound of raisins, one-half of a cupful of chopped citron, one-half of a wine-glassful each, of sherry, brandy and milk, one-half of a teaspoonful each, of vanilla and mace. Bake in a slow oven. Sauce 8.

THURSDAY, MARCH 28.

Waffles.

Three pints of sour milk, six eggs beaten stiff, two tablespoonfuls of melted butter, two teaspoonfuls of soda, one-half of a teaspoonful of salt, flour for soft batter. Bake in greased waffle irons over a good fire, eat with maple syrup.

FRIDAY, MARCH 29.

Cocoanut and Apple Pudding.

Put in a buttered dish three cupfuls of hot apple sauce mixed with one cupful of sugar, one tablespoonful of butter, little nutmeg, one tablespoonful of smooth corn-starch, one egg beaten stiff. Strew cocoanut over the layer with a little powdered sugar, cover with bread crumbs and bake. Sauce 12.

SATURDAY, MARCH 30.

Orange Fritters.

Make batter of one pint of milk, two teacupfuls of flour, three eggs, two teaspoonfuls of baking powder, saltspoonful of salt. Divide an orange into lobes, removing seeds carefully. Drop each section in a spoonful of batter and that in deep hot lard, and fry. Eat with maple syrup.

SUNDAY, MARCH 31.

Blackberry Blanc Mange.

One quart of boiling milk, four tablespoonfuls each, of sugar and smooth corn-starch. Boil in hot water till thick, when cool, stir in one-half of a cupful of strained juice from canned blackberries. Serve cold in moulds with sauce 10.

-Ruth Hall.

THE BUFFALO BUG.

The name of all others that rhymes best with rug Is the name of a mite, called Buffalo Bug! It's a hairy, horny, an horrible thing, Though, thanks to kind Nature, it cannot sting. It can run like a fox, or creep like a snail, Whilst its appetite never was known to fail. Your carpets, your mats, your coats and your hats 'Twill quickly devour, then, just like the rats, Slip into a cranny and hide like a thief; And, as true as I live, it is my belief The creature is only a witch in disguise, Who delights in taking some folks by surprise, Who delights in making mischief and trouble, Then cluding one's grasp like a blown bubble,-It's a waste of your time, your strength and your skill, The Buffalo Bug to hunt and to kill. 'Twill make its appearance, some unlucky day, When you're sure you have chased the whole herd away; 'Twill haunt you and daunt you until you will cry, "I wish, in my heart, I could lie down and die!

-Anna M. L. Moseley.

BUFFALO BUGS.

"You lie down to your shady slumber And wake with a bug in your ear."

YES, I know them, I have been introduced. If there is any subject upon which I can wax eloquent it is this same tiny beetle. Were it not so nearly tragic there would be something positively ludicrous in a picture often seen. Imagine a lady of commanding presence, possibly an advocate of woman's suffrage, perhaps a writer of powerful essays, or a skilled musician, creeping about the floor, poking into corners, pounding upholstery and brushing draperies. What an intent expression, what a triumphant look as she pinches a small victim between thumb and finger. The only agreeable (?) point I have ever heard mentioned about the insect is that it is "so clean to kill." Its body crumbles into fine dust at the touch. To England we owe this pest as well as that of the condemned sparrows. We have sent our cousins the potato bug in return, but that hardly balances the account. Still, in England, we are told, that this beetle, satisfied with rich vegetation, rarely enters the houses. A Massachusetts lady states that her beds of choice tulips are just covered with them in the spring. Others have been found plentiful on maple trees. In the mature state they fly into the windows in the early spring before the careful housekeeper thinks of screens. They lay their eggs in the softest, rarest fabrics. Woolen, silk or cotton are all acceptable, but they prefer bright colors, and light rooms. They often begin their ravages in attic chambers.

I have never been able to detect the egg and rarely the insect in the transition state which it passes through, like others of the genus beetle. As a perfect beetle it is gray in color and its back dotted some like the lady-bug with which it is often confounded, though much smaller. Its ravages are committed when in the hairy worm form, when its body is pointed like an apple seed. The name buffalo probably comes from its bushy appearance at this time.

At the north July and August seem the most favorable for its development, but, like the yellow fever in the South, it will not be strictly limited to so short a period.

Such tales of destruction have come to my ears, and not fairy tales either. Dresses hung up on Sunday have been positively riddled by the next. Sheets in the store-room have been perforated as with an eyelet-machine. Even feathers drop to pieces at their attack. Packages done up in newspapers are more secure, as they do not enjoy printer's ink. Straw matting is not exempt and they often gambol over it with seemingly malicious enjoyment. I have often found a group under a bit of red flannel or carpeting in the center of a room, and it serves as a very good trap. From my own experience, I am inclined to concur in the general statement, that nothing but a "pinching method" will effect their extermination.

Closets saturated with naphtha fumes will show the insect as lively after as before this treatment. Naphtha will kill the insect if directly applied and so will ammonia, but I doubt its efficacy in destroying the eggs.

Scholarly druggists who are honest say they really know nothing but persevering search which will do any good. Hot water or irons will be helpful when they can be used without injury to fabrics, but "vigilance" in mistress and maid at present seem a necessity.

Poets write of the delights of summer, of the delicious air, sweet sounds in nature, fine coloring of landscape, but these same poets are rarely women and housekeepers. What with the approach of the buffalo bug, the moth, mosquitoes, ants, roaches, etc., etc., a woman must cultivate all the virtues to be queen of herself and her surroundings.

-M. Louise Robbins.

NOTE: This refers to a "carpet beetle."

HOUSEKEEPING IN FOREIGN LANDS.

IN THE CITY OF PARIS.



OUSEKEEPING in Paris is an easy matter compared with housekeeping in Boston. Perhaps, this is why there are twenty-five thousand resident Americans in Paris, although as a friend says "We live in Boston, we only exist here." It is doubtless a fact, that living for a short time in a city one naturally gets along with a simpler way of living, but many things combine to make housekeeping here as easy as breathing. In the first place, the cook does all the

marketing and she does it much cheaper than the lady of the house can do it, as I have proved by experience. Everything is bought by the teaspoonful as one might say; that is, only the supplies necessary for the day are purchased, and consequently there are no store rooms to look after. The kitchen utensils are hung around the kitchen in plain sight, and, therefore, must be clean, and there are no closets to clean out. The washing is all done out of the house, so "washing and ironing" days are unknown. The bread is also made by the bakers and brought to the house. A girl can not leave without fifteen days' notice on penalty of forfeiting her wages for that time previous. Moreover when a little party is given the refreshment is, by custom, very simple; which certainly renders entertaining easier. A hostess can sit and discuss "theosophy" or the "occult sciences" without any harassing thoughts in the direction of the kitchen, as everything is arranged beforehand and is sure to be all right.

French houses are five or six stories high, and each floor is let separately; the ground floor is called the parterre, the next floor the entresol, and at the third floor you begin to count, calling that the first etage. As there are no elevators, it is rather tiresome living in the fourth or fifth etage, but some of the best people prefer it. They say the air is purer, and there is more light. Moreover "the nearer Heaven the cheaper the rent." These apartments have a common stairway and front door, but the unsocial European habits render your isolation as complete as if you were in sole possession. With each etage is let a "cave" or cellar, for the storing away of old boxes, etc. Wood and coal are generally bought by the small quantity, like everything else. There is no economy in buying a large amount, as you will be obliged to hire a man each day or so to carry it upstairs.

It is very easy to hire furnished or unfurnished apartments for any length of time, even for three months. Of course, the price varies according to locality. A desirable apartment of six rooms, comfortably furnished, is about \$100 per month. The furnishing does not include bed or table-linen, or silver. An unfurnished etage is, of course, much cheaper, and furniture can be obtained at the auction rooms at a low figure, as the population here is very migratory. The furnished rooms have a liberal supply of mirrors, but the furniture is not generally substantial or comfortable. Instead of bureaus, "armories" are used, which are simply wardrobes filled with shelves, or a sort of portable cupboard with one drawer at the bottom. There are no knobs on any drawers here, all being opened by a key. The windows are arranged to keep out as much light and air as possible. They open in the center, opening into the room like a door. They are provided with an iron grating, about two feet high, for protection from falling out. They have Venetian blinds outside (which, by the way, are never used in Venice), are covered

with sash curtains of lace inside, from ceiling to floor, and also, heavy curtains of damask. If by chance a ray of sunlight straggles into the room, the "girl" rushes to drop the Venetian blinds. One useful idea I will mention. The heavy bedsteads have a little wooden groove placed under the casters, a little "railroad track" as the children call it, which makes it very easy to move. This is made in two parts hinged together so that the ends are folded under the bed when not in use.

As you enter a house from the street the first room opening into the hall is occupied by the *concierge*, who is a most valuable person. She looks after the halls and staircases, brings up packages, runs errands, attends to the mail and is always ready to give all needed information. When calling at a house the *concierge* of the place can tell you on what floor you will find the individual you wish to see, and whether they are at home; thus saving you useless climbing of the stairs. She will also take up your card, or deliver any message.

The rooms are heated by grates but, as an American usually finds the heat insufficient, small iron stoves called American heaters have lately been introduced. The rooms are lighted by lamps, and usually by old-fashioned whale oil lamps, and the bed chambers by candles which make darkness visible.

The kitchen is small, but convenient, and the kitchen stove a miracle of ingenuity in the saving of fuel. In one place the gas can be turned on to boil water for the tea. In another a handful of charcoal to broil a steak.

The soup kettle always stands on the back of the stove, and into it goes every bone or bit of meat not used on the table. Soups are made of everything and anything, but they are not as "filling" as American soups.

The ordinary French breakfast consists simply of bread and coffee, and one gets used to it in time. The real breakfast or *dejeûner* is served at noon, and dinner at six.

A little food goes a great way in a French dinner. First is soup—palatable but thin. Then, a small amount of fish. Then, one solitary vegetable, then the principal meat course and another vegetable. Then, salad with a little chicken. Then, fruit or a very small pudding. There is a grand flourish of clean plates with every course, and small pieces of bread to fill in the interstices. The table is always prettily decorated. Every one eats slowly and talks well, or tries to at least, and there is a "feast of reason and flow of soul" to make up the lack of substantials.

The French bread is excellent. The petit pain consists of small, narrow rolls, principally crust. Then, there is pain sans mie which is all crust; gros pain which has more middle and comes in loaves half a yard long, and also square loaves like our own. There is a bakeshop on every corner, and a pâtisserie opposite, where you can buy delicious cakes and pastry.

French servants are deft at decorating a table or a room, and seldom break things, but that may be because they are obliged to replace all broken articles.

The cooking is universally good, and they excel in making fancy dishes, and in economical cooking.

They are not as a rule very neat, and are prone to be untruthful. They have the reputation, also, of being dishonest, although I can not state that as my personal experience.

The second girl not only waits on the table and takes care of the chambers, but also does the family mending, and can even make over dresses. Wages are somewhat higher than in Germany. A good cook gets \$10 per month and her wine, which consists of two quarts of *Vin ordinaire* per week, costing about 25 cents. House-maids receive about \$8 per month.

Groceries and provisions of all sorts are higher than in America. Tea is \$1.20 per pound and coffee 75 cents.

Fruits are also about double the price in Boston, except grapes or figs. The fresh figs are very tasteless.

There are plenty of shops where one can buy any sort of meat ready cooked. Snails are sold in large quantities, and it is said a great deal of horse meat is sold in Paris. The beef is good and the mutton also, but by no means equal to that of England. Mushrooms are plentiful and cheap. Stuffed mushrooms are very nice.

Good schools abound in Paris. The girls are looked after as if they were babies in long clothes. They are taken out to walk each day, in a long procession guarded on all sides by teachers. One day a pert young American gentleman smiled sympathetically at the girls, and the head teacher stopped and called him "a brute and a villain." In riding out one day I passed a garden surrounded by a wall at least fifty feet high and wondered what it could be, and my daughter dryly remarked "probably a girls' school."

The facilities for studying art, music or the languages are unequaled. Instruction in the best studios is only sixty francs or twelve dollars per month. Music teachers charge at the rate of one dollar per lesson upward, and a good piano can be rented for three dollars per month. A resident governess speaking two or three languages can be obtained for \$15 per month.

French shops are brilliant, and everything under the sun can be obtained in them. After the superb indifference of the "sales-ladies" at home, the deference of French clerks seems almost ironical.

Nothing is too good for an American and nothing can exceed the price we are expected to pay. They seem to feel we all have the purse of Fortunatus. A spirit of mercantile honesty does not exist, and it behooves one to be very wide-awake in shopping. There are several large shops where everything is marked in distinct figures.

All differences between Frenchmen and foreigners are speedily settled in favor of the former if an appeal is made to the law; it is therefore wise to make all bargains in writing, and to "pay as you go."

As Paris is so large a city transportation is a matter of importance. All cabs have their tariff fixed by law. A single course within the city limits, for one or more persons, is thirty cents. By the hour it is forty cents, but you are always expected to add a few cents for *pour-boire*.

Crossing the streets on foot is often very difficult. Carriages have the right of way, and if a person is run over and injured there is no redress; moreover, if the carriage is injured the person must pay the damages. One can go all over the city in the horse-cars and the onnibuses.

Any car will carry you for six cents and give you a "correspondence" ticket for the bus. Most of the cars are double-deckers and you can ride on top or on the platform for three cents.

-C. R. M.

MACARONI.

Macaroni is a peculiar product of wheat, formerly made only in Italy and still popularly regarded as a distinguishing diet of the natives of that country. The name is now applied only to the larger pipes, and the smaller ones are known as vermicelli, though there is no real difference between the two except the size of the tubes. The wheat is ground with the use of heat and moisture into a sort of meal or paste called semola, from which the bran is excluded. This meal is made into a dough with water, and is forced through gauges from which it emerges as macaroni or vermicelli, the process resembling that of lead pipe drawing. Special varieties of wheat, those containing the largest proportion of gluten, are demanded for the successful manufacture of macaroni.

ORIGINATING FASHIONS.

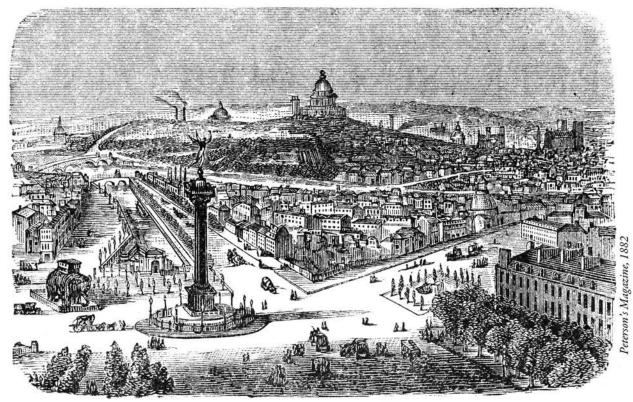
Fashions are disseminated through the imitation of the masses of the people and the aping of the wealthy by the poorer people. The belle who has the confident air of one who is dressed in fashion, may have an idea that it is derived from Paris, but probably the process of creating and spreading the fashion never came to her knowledge. It is interesting to note the facts. Twenty years ago it was easy to state precisely how fashions started; the French court set the example and if the Empress, the Princess de Metternich, the Duchesse de Morny, or the Comtesse de Hon came out with a new toilet resulting from long and learned conferences with the dressmaker—if it pleased, if it seemed to suit every type of woman's beauty, it was adopted. The court ladies wore it as a sort of obligatory livery; the rich bourgeoisie copied it to be as well dressed as the court ladies and if it was not too costly the tradesmen's wives tried to imitate the others.

But the French court no longer exists and the great ladies who gave the ton under the Empire have abdicated. They have left their successors, however, and it is this group of elegantes, under the form of rich costumers of intelligent and tasteful artists, who decide what is to be worn. They are not more than twenty all told who accept the grave responsibility, and in the splendid "trying on" rooms of the most celebrated man milliners meet the elite of the ancient nobility, the ladies of the financial world, the wives of wealthy merchants and manufacturers, even the world of favorite actresses, and these, forgetting all prejudices of class and caste, discuss proposed modifications and give to them their sanction or their veto. Occasionally for want of something original they take the word of order from the fashions of some foreign court.

The fashion once originated, it is propagated, not by the official world nor by actresses, but by dressmakers who work on a large scale and at prices within the reach of the masses. The fashion papers take it up and push it in the circle of their subscribers. The work of the Bon Marché and others of its kind here comes in, and if the new toilet can be copied economically, if it is made of some fabric of which a cheap imitation is possible, the managers of the Printemps, the Bon Marché and of the Louvre forthwith order from their manufacturers enormous quantities of apparently similar stuff, which shall cost a half or two-thirds less. The pattern is got from one of those needy great ladies who is hired to go and order a gown from the king of the fashion for herself, which gown is turned over to the shop's head seamstress and copied in every detail, said copy being given to another needy one, by whom it is paraded in public and recommended as "just the same as the Duchess de X paid Worth 1,500 f. for and it only cost me 300."

From that moment the creation is within the reach of every purse. But while the prevailing fashion is being created the initial fashion disappears. The leaders will not wear things that everybody can get.

The fashions of man's attire originate in Paris on the meeting of the chief tailors, by whom a committee is appointed to devise and edit a plate, in which are set forth and decreed whatever modifications the honorable guild has decided to make. This plate is the model of the seasons, and by it the knights of the shears and their brethren in the provinces and in foreign parts are guided. The French fashions for men's clothing, however, are largely copied from the English and have been for half a century. The congress plan has not worked well with the man milliners and women dressmakers, for they cannot agree, so Worth, Laferrière, Pingat and Felix create independently.



PARIS, FROM THE HILL BY ST. CLOUD.

HOUSEKEEPING IN FRANCE.



EVERY year Paris is becoming more and more universally recognised as the centre par excellence for the study of almost every subject. The countless public studios with their staff of visiting professors; the conservatoire, and the number of famous music and singing masters; the college and Sorbonne with their astonishing system of free lectures; the schemes of popular instruction organised in every department of the city, and open to foreigners and French alike—these, and other educational advantages, attract eager students from all parts of Europe and America.

Even when the necessity for systematic study no longer exists, there is so much to be learned simply from living in the beautiful city, that it is common to meet with those who have come to spend a few months, and who are still here after the lapse of years.

And the band of foreign students would probably be even larger than it is, were it not that many who long for the advantages of the French capital, are ignorant of the cost and convenience of life there. The casual visitor to Paris finds that the pleasures of the city, if indulged in to any extent, make such inroads on his exchequer that a long stay seems possible only to the millionaire.

And yet, for those who have work, and not luxury, at heart, I believe there is no city where one can more easily combine comfort

and economy, than in Paris.

There are, of course, all grades of expenditure to suit all circumstances. There are numberless good pensions where one can be comfortable, and even luxuriant, for from eight to twelve francs a day. This is inclusive of everything, except fire and light in bed-rooms, and an occasional "tip" to the concierge. The first two extras are higher than in England. The usual price for a small box of coke is one franc, the bundle of twigs which kindles the fire costs fifteen centimes, and if one is extravagant enough to burn wood, twenty centimes a log must be paid for it. Paraffin (pétrolé) and methylated spirits (alcool à leraler) are correspondingly dear, even if one caters for oneself in these commodities, pétrole costing sixty centimes, and alcool one franc twenty centimes a quart.

For a lengthened stay, however, most people prefer to have more freedom and privacy than is possible in a pension, and to have more of their own belongings round them. Unfurnished suites of rooms are not difficult to find, and the rents vary according to the size, situation, and elevation. The French servants are, as a rule, good, and capable of more work than the English, but their wages are high.

A bonne à tout faire corresponding to our "general" receives from £25 a year, and often ten francs a month for extras. In

addition to this, it is the custom for the servant to do the marketing, and her perquisites from the shops amount to five centimes in the franc. This is rather a regrettable system from the mistress's point of view, as it offers a premium on extravagance to all but the most highly principled cooks.

When the household is large enough to require two servants, a man and his wife are very often employed. Men-servants are much more general than with us, and a good valet de chambre is invaluable, as there are few things he cannot turn his hand to. The husband and wife plan is found to answer very well when the two are sufficient for the work, but clouds soon gather on the domestic horizon when an outsider has to be introduced.

But as this paper is intended more especially for the students whose classes make too great a demand on their finances to allow of the conventionalities of ordinary English family life, I shall now give some details as to how many of them live. Two friends of mine took a small appartement in a side street in one of the most fashionable quarters of Paris. They were studying singing, and, realising that in that profession, more perhaps than in any other, robust health is essential to success, they wisely chose this situation as being the healthiest in the city. Their little flat was two stairs up, and consisted of three rooms and a kitchen. The salon was a pretty room, furnished with miscellaneous, nondescript pieces of furniture, picked up here and there in second-hand shops. Photographs, flowers, books, a piano, and liberal supply of music gave it the homely look which made it so attractive and cosy. As one was already a singer of some renown they had many visitors, and they were forced to use their other room as a dining-room, and so were left with only one bed-room. It was large, however, and the French furni-ture is neither so bulky nor so suggestive of a sleeping apartment as ours is. The kitchen was a tiny corner, but so complete and compact as to delight the heart of any housewife.

Standing at the stove, which was new and easily managed, it was possible to reach almost any article on the shelves round the walls, and cooking was a pleasure rather than a task. The rent of this flat, inclusive of all taxes, was £35 a year. The convenient arrangement of everything—for it was a new building—made it quite unnecessary to keep a maid. Every morning the concierge did any heavy work that might be required, and three times a week a charwoman came in, who, for thirty centimes an hour, tidied the house generally, and cooked very appetising little lunches for them.

But even the preparation of their own meals was not a matter of great difficulty. The charcuterie shops in Paris are full of tempting dainties, which require little trouble to prepare. Cutlets are dressed, and ready for the frying-pan, halves of roast fowls only require to be heated, and there is a veritable embarras de choix in the matter of cold viands for lunch or supper.

But to many students such an expenditure would be an impossibility, so we shall turn to another couple, still more modest in their establishment. As they are art students their rooms are in the heart of the Quartier Latin, and are on the fifth floor, two circumstances which imply a more reasonable rent. The 250 francs (\$10) asked from them reconciles them to their inconvenient elevation, and, for them, the situation otherwise is ideal. Their own clever fingers and fertile brains have made their little sitting-room into a tasteful, cosy, little salon, in which as many happy hours are spent as in the most sumptuous apartments. They consider that their food, which they prepare themselves, costs on an average from ten to twelve francs a week, each, so that their annual expense for board and lodging amounts to something

like £30.

When it is necessary to have a studio, however, rents are higher, and £18 is no uncommon price to pay for a studio which serves as work-room, dining-room, bedroom, and salon. The room is usually large enough to allow of a curtain being hung across, which can be drawn at will, and so divide the studio proper from the living-room. I know one like this which its owner would not change for the most luxuriant quarters. It has the great merit of having three windows overlooking a

garden—a rare advantage of infinite value in the exhausted atmosphere of Paris.

An artist is always able to turn her material to the best account, and what, in itself, would be simply a large unsightly room, is, by means of a few draperies skilfully arranged, the proper placing of a bright bit of colour, etc., transformed into an attractive studio, rendered even more so by the evidence of the owner's individuality. For in a studio there is no room for conventionalities, so each is a fresh pleasure as being the expression of an in-dividual nature. The walls are covered here and there with odd lengths of tapestries, which can be had very cheaply at the Bon Marché during a sale, or even on a Friday, which is the jour des coupons at the Maison Boucicault. There is no large bed to assert itself prominently, only a delicious broad couch covered with an artistic rug, which is a joy to the tired eves by day, and to the weary body at night. A curtain arranged across one corner can conceal any toilette accessories better hidden, and when the cooking utensils are arranged tidily on a shelf, they are not obtrusive. A large screen hung with draperies stands ready behind the model's throne, suggestive brocades are thrown over low lounge chairs, from which they can be taken to be used as backgrounds, an old copper dish is placed where the light catches it, a bit of brilliant blue china brightens a dark corner, and an element of artistic disorder is supplied by numbers of half-finished sketches and studies, photographs, old prints, and Japanese panels.

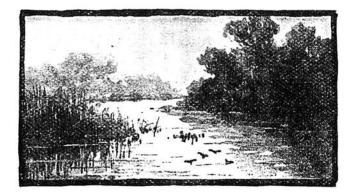
About the month of July it is possible to pick up odd pieces of furniture at an astonishingly small price. There are always a number of students returning to England at that time, and the walls of the public studios are covered with notices of sales. Other students who intend returning in autumn, are often only too glad to find a tenant for their studio during their absence, and anyone who is willing to risk suffocation by stopping in Paris during the summer months can find accommodation practically gratis.

The concierge is a Paris institution unknown in England. He is really the resident representative of the landlord's interests, and lives in a room at the side of the entrancedoor, from which all who come in can be seen and watched. At ten o'clock in the evening the street-door is closed, and can only

be opened by means of an arrangement of wires coming from the concierge's bedroom. Everyone coming home after that hour must call out his name as he passes upstairs, so that the concierge may be assured that no intruder has gained admission. The concierge also collects the rents, attends to the respective behaviour of the various tenants, receives all letters from the facteur, keeps the stairs in order, and, in large houses where the whole building is heated by a calorifère in the basement storey, he attends to this from November until March. Much of one's comfort depends on the humour of the concierge, and so it is customary to secure his favour by a handsome "tip" on taking possession of the appartement, and again at Christmas.

There are one or two rules which householders are bound to observe, and the concierge receives and transmits any complaints following on their infringement. Pianos are supposed to be silent by eleven P.M—except on special occasions; any shaking of rugs and carpets over the windows must be done before a certain hour in the morning; and there are one or two other common-sense regulations to which it is no hardship to conform.

As to the necessities of life, there is no doubt that they are dearer in Paris than in London. Butter ranges from two francs a pound upupwards; sugar is sixty centimes, bread is dear, butcher-meat is dear, and poultry is ruinous, so that the reason one can live more economically in Paris than at home is, that it is possible to live in quite a different style without losing one's self-respect, or the respect of one's neighbours. In the student quarters, at least, there is no overwhelming feeling of degradation because of having to do for oneself what the neighbours' servants do for them, for there is a bon camerade feeling of equality, irrespective of income and establishment. This feeling has a great charm for those accustomed to the limitations and restrictions which weigh upon all provincial life. There is also a certain congeniality of intercourse which is unusual in ordinary society, for all are working, and nearly all have common interests. Those who have passed through a period of student life in Paris with all its discomforts -which are sometimes great in cold weatherits discouragements, but with its concentration of aim and freedom of action, have never two opinions to give as to its value and its pleasures.



HOUSEHOLD HINTS.

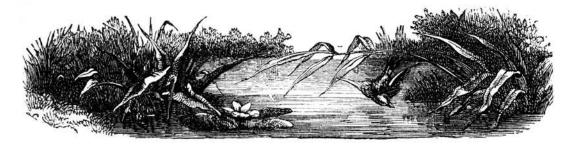
To place a piece of oil-cloth or American baize over the whole or part of the kitchen table is a very tidy plan and saves constant scrubbing of the table.

POWDERED rotten stone moistened with a little paraffin, cleans brass-work beautifully, after it has been washed with soap and water, and at the end rubbed with a clean leather. BREAD-PANS and cheese-pans should be carefully wiped out every other day, and any pieces of broken bread not left in the pan, but put on a dish or plate till it is decided what shall be done with them.

SOFA covers and rugs should be frequently lifted and shaken in summer to find out if there are any moths underneath. Spare blankets

should also be inspected, and fur cloaks and trimmings should be well shaken and lightly beaten occasionally.

ALL green vegetables should be carefully washed with a little salt and water to free them from the insects that find a home in them, otherwise one may have unpleasant experiences at the dinner-table.



THE BROOK AND ITS BANKS.

BY THE REV. J. G. WOOD, M.A., Author of "The Handy Natural History."

CHAPTER IV.

Another enemy of the water-vole—The pike—Pike in brooks—The Oxford giant pike—A sad failure—An ignominious end—The pike and the eel—The pike and the duck—Links in Nature—Cousins of the water-vole—The campagnol, or short-tailed field mouse— Damage which it works-Its natural enemies —the kestrel and the owls—How to detect and catch a campagnol—The kestrel—Its peculiar mode of flight—Altering the focus of the eye—The nest of the campagnol—Beans and the mouse-The humble-bee and wasp -More connecting links-Store chambers of the campagnol-Its bird-purveyors-The blackbird, thrush, and campagnol-The winter and summer nests-A beautiful specimen and remarkable locality-Mode of eating.

WE have not yet completed the life-history of the water-vole, which, as I remarked, involves that of several other creatures.

One of its two worst foes has just been described, and we now come to the secondi.e., the PIKE, OR JACK (Esox lucius). N.B.-The latter name may perhaps recall to the reader the ancient family of the Lucys, of Charlcote Hall, Warwickshire, so mercilessly satirised by Shakspeare. They bore upon their shield the "luce"-i.e., the pike, the coat of arms being a good example of "cant-" heraldry-i.e., in which the blazonry of the shield contains a play upon the name of the bearer.

There is no more inveterate foe of the watervole than the pike. In the stomach of a single pike were found the remains of three watervoles and some bird, which was probably a duck.

It might be imagined that a pike large enough to swallow a water-vole would not be likely to venture into a brook, and would restrict itself to the river where it would have plenty of room. But experience has shown that a very large pike will sometimes make its way into a very small brook, partly for the sake of food, but sometimes through sheer cunning, in the hope of evading its enemies.

By the time that a pike has attained the weight of twelve or fifteen pounds, he has had to face many and varied dangers, and escape

from many foes.

While he is young and small his worst foes are those of his own species. Anglers know that there is scarcely any bait so attractive to an old pike as a small pike. All the earlier part of his life is spent in perpetual watchfulness, he having to be always on the look-out for prey by which he can still his insatiable hunger; while he has to be equally on guard lest a larger pike should satisfy its hunger with

No pike, therefore, can attain to a large size without developing a considerable amount of cunning, and anyone who sets himself the task of catching such a fish will find that he must employ all his resources of intellect, aided by experience, before he can delude the fish even into touching the bait. In spite of its large size, the fish manages to clude observation in a most puzzling manner, and it is no easy

matter to make sure of its position. An old fox or old rat is scarcely more cunning and full of devices than an old pike.

The largest pike that I ever saw at liberty was in a small tributary streamlet of the Cher-

well river, near Oxford.

A pike of enormous dimensions had for some time been reported as having been seen in various parts of the Cherwell, the general rumours giving its weight as at least thirty pounds. All the anglers of the neighbour-hood had tried to capture this mighty prize, but had failed. Contrary to the habit of most large pike, it did not seem to have established itself in any particular spot, but roamed about from place to place.

Now, the Cherwell itself is but a very small

river, so that the locality of a large fish might appear easily discoverable. But it is a very "weedy" river, and its banks are edged with willows, whose long, red, plume-shaped roots hang into the water from the banks, and form admirable hiding-places for the fish.

One day I was trying my fortune at trolling in the Cherwell, with a six-inch gudgeon for bait, and, on coming to a tributary stream, walked along the bank until I could find a

spot narrow enough to be jumped.

Coming to a deep-looking pool, I dropped in the bait, by way of not wasting time, and almost immediately felt the bait taken by a pike. Following the golden rule then, and perhaps now, in force among anglers, I sat down on the bank, watch in hand, in order to wait through the weary ten minutes prescribed by custom, and which almost seem to drag themselves out into as many centuries.

Barely half the time had elapsed when a huge head rose to the surface, and the bait was blown out, as it seemed, into the water, the head sinking with a swirl of water where it disappeared. On examining the rejected bait, which had naturally been seized crosswise, I found that it was pierced from head to tail with the teeth of the pike.

I learned that the big fish was afterwards ignominiously taken with a net in one of these tributary brooks, so that its cunning was baffled at last. I also learned that the fish had repeatedly treated other anglers as it treated me, holding the bait for a short time in its mouth and then rejecting it.

So it is clear that the water-vole will by no means be safe from the pike when it is the inhabitant of the brook instead of the river.

Moreover, it does not need a very large pike to devour a full-grown water-vole. The pike can swallow an animal which seems quite disproportionate to its size. A young pike of barely five inches in length was seen swimming about with the tail of a gudgeon projecting from its mouth. The gudgeon was quite as long as its captor, and there is no doubt that if the fish had been let alone the pike would soon have digested the gudgeon sufficiently to swallow it entirely.

The late Frank Buckland mentions that a pike weighing eight pounds was caught in the River Itchen. After it was taken out of the water it disgorged a trout of a pound weight. This must have been a sore disappointment for the captor, who would think himself defrauded of a pound weight in his angling record.

The reader will remember that a heron and a cormorant lost their lives by capturing an eel which was too large for them, and it is a remarkable fact that a pike has been known to suffer a similar fate. It can easily be understood that an eel, twisting itself about convulsively in the struggle for life, should coil itself round a bird's neck long enough to cause its death by strangulation; but it seems almost impossible that a pike, being a fish, and therefore breathing by gills, should be suffocated while in the water by an eel.

Yet in the Fisheries Exhibition of 1883 there were two very remarkable stuffed groups, illustrating the voracity of the pike. In one of them a pike weighing ten pounds had attacked an eel weighing only one pound less. Now, an eel of nine pounds weight is a very large one, lithe, active, and muscular as a snake, and by no means a despicable antagonist. The pike had begun to swallow the eel, but the latter in its struggles forced its way out of the mouth through the gills, and thence into the water beneath the right gillcover. But it could go no farther, the teeth of the pike having almost met through its body.

The result was fatal to both. The body of the eel having been forced beneath the gillcover, the gills could not perform their office, and so the pike was as effectually suffocated for want of breath as were the heron and the cormorant. The dead bodies of the pike and eel were found on the bank of the River Bure

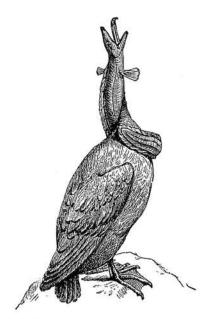
in October, 1882.

The second group consisted of a pike and a duck. The pike had attacked the duck as the bird was diving, and had tried to swallow it. It succeeded in getting the head, neck, and part of the breast down its throat; but the duck, in its struggles for life, had naturally spread its wings. These formed an insur-mountable obstacle to the fish, and the result was that the duck was drowned and the pike suffocated, both having died for lack of respiration.

So the "plop" of the water-vole into the brook from the bank has not been to us the mere splash of a frightened animal into the stream. It has opened for us many trains of thought, and taken us into several sciences. It has shown us something of the links which connect it with man, birds, and fishes, and so has led us into ornithology and ichthyology. It has shown how the inventions of man have their prototypes in the animal kingdom. Comparative anatomy and physiology have also been shown to form portions of the lifehistory of the familiar animal, and have demonstrated the truth of the axiom enunciated before, that no animal and no branch of before, science can stand alone.

LIKE other beings, the water-vole has its relatives, two of whom will come within the range of our subject. Being small creatures, they go by the popular name of mice, just as their larger relative is popularly called a rat. These are the FIELD-VOLE and the BANK-VOLE, both of which we may expect to find on the banks of our brook, especially when the banks are clothed with shrubs. The for mer of these animals is a very old acquaintance of mine, and when I was a lad I could go into a field and make almost certain of catching a field-vole (Arvicola agrestis) within about ten minutes.

This little animal looks very much like a water-vole seen through the wrong end of an opera-glass, except that the fur is redder and the ears are longer in proportion to the size of



A CORMORANT STRANGLED BY AN EEL.

the head. The tail is only about one-third as long as the body—a peculiarity which has earned for it the popular name of "short-tailed field-mouse." A more appropriate name for it is "campagnol."

Even in this country the campagnol is apt to be one of the worst foes of the agriculturist, especially at harvest and seed time.

Not only does it devour the ripe corn in the field, but it makes its way into ricks and barns, and eats large quantities of the gathered corn. Moreover, just after the seed-corn has been sown it digs the grains out of the ground, thus doing mischief which is often attributed to the sparrow and other small birds. In France, however, where not a kestrel, or, indeed, any unprotected bird, can be seen, the campagnol can carry out his depredations without hindrance, and consequently increases until it becomes an actual plague. In the Department of Aisne alone a few years ago the fields were honeycombed with the burrows of the animal, and the farmers spent some seventy thousand pounds in ridding their fields of the nuisance. First poison was laid down; but so many hares and rabbits were killed that another plan had to be tried. Stacks of hay and straw were then made, containing quantities of poisoned carrots, turnips, and beetroot. The agriculturists, therefore, had to pay heavily for doing that which the kestrel would have done to a great degree, if they had suffered it to live and carry out its appointed work in preserving the balance of Nature.

The owls, again, are determined enemies of the campagnol, more than half the food on which they and their young live being composed of these mischievous little animals. Fortunately for the owls, their nocturnal habits save them from the destruction which would have befallen them had they sought their food in the light of day.

If we wish to see this pretty little creature, we have only to watch carefully the field through which our brook runs, and we shall be almost certain to find it. But we must know where to look and how to look.

The favourite locality of the campagnol has already been mentioned; but the detection of the little animal requires some practice. A novice in the art may traverse a low-lying field, and hunt along the banks of the brook from daybreak to dewy eve, and never catch a glimpse of a campagnol. Another will go into the same field, and in a quarter of an hour will produce several specimens.

Those who wish to catch it must know its ways. It is not of the least use to hunt up and down the field in chase of the campagnol, and those who wish to see it must reverse the old aphorism about Mahomet and the mountain. They cannot go to the campagnol, for it will keep out of their way; but if they will wait patiently, the campagnol will come to them.

The secret for catching the campagnol is as follows:—

Go into any field which is bounded by a brook, and lie down, taking care that the sun faces you; otherwise your shadow will be thrown on the grass, rendering the detection of the animal extremely difficult.

When you have arranged yourself in an easy posture, keep your eyes on the ground, and try to look between the green blades, so as to see the colour of the soil. On a first trial you may probably wait until your patience is exhausted, and yet see nothing. But do not be disheartened, and try again, as nothing but practice will give the needful skill.

Only a small portion of ground can come under your observation as you recline on your arm, and a few minutes ought to make you acquainted with the colour of every inch of the soil. Presently you will become aware that a little patch of soil is redder than it was a minute or two ago. Bring your free hand down smartly on the spot, and you will find a campagnol in your grasp.

Immediately afterwards you will find that the campagnol has teeth, and knows how to use them. But if you understand the animal's ways, you will seize it without danger of being bitten, just as if you know the nettle's ways you can grasp it without danger of being stung.

Like its larger relative, the campagnol, when suddenly startled, loses its presence of mind, and remains for a moment or two without motion. During that moment of consternation, shift your grasp so that the body of the animal rests in the palm of the hand, while the finger and thumb seize the sides of the head, so that the creature cannot turn its head to bite. The knack is soon learned, though perhaps at the expense of a bite or two, and the shifting of the grasp becomes instinctive.

Want of practice soon causes the eyes to become slow to detect the creature which steals so silently among the gras: -blades, and the ready knack of the fingers is equally apto fail just when it is wanted. However, a little practice soon restores the keenness of sight and definess of touch, and in a short time the campagnol will be unable to pass under the observer's eyes without detection, or to escape the grasp of his fingers without capture.

capture.

So stealthily does the campagnol glide among the grass stems, that the field may be swarming with them, and yet their presence will not even be suspected by man. This fact brings us to another illustration of the asser-

tion that the life-history of one animal always involves that of others.

The natural food of the KESTREL (Tinnsincatus alaudárius) largely consists of the campagnol, so that where the one is seen the other will probably be at no great distance. High in air the kestrel hovers with quivering wings, its bright eyes directed downwards, and scanning the field below. Suddenly it drops down to the ground, rises with something in its claws, and flies away. It has seen and caught a field-vole, and is carrying it home to its young. From its custom of balancing itself in the air with it's head to the wind, it is often known by the name of "windhover."

With what astonishing sight must not the kestrel be gifted to perform such a feat! It is difficult enough for a human being to watch a square yard of ground so carefully that a field-vole shall be seen as it glides among the grass. How wonderful, therefore, must be the powers of vision which enable the bird to watch a large field, to detect from that height the little, dusky animal, and pounce down upon it with unerring swoop!

How astonishing must be the optical mechanism of those eyes which at so great a distance from the prey can act like telescopes, and yet can alter their range so rapidly that in the few seconds which are consumed in making the stoop, they have accommodated themselves to an entirely different focus.

themselves to an entirely different focus.

In his "At Last," C. Kingsley mentions that in passing through a tropical forest the traveller is frequently checked by some creeper which hangs in the path, and which is not seen because the eye cannot focus itself with sufficient rapidity. Yet the traveller is only proceeding at a walking pace, whereas the stoop of the kestrel on its prey is swift as the fall of a stone through the air, and in a second or two the eye has to accommodate itself from a range of many yards to that of a few inches.

The value of the kestrel in keeping down the numbers of the field-vole, and so aiding in preserving the balance of Nature, can hardly be over-estimated.

There have been cases where the field-voles had increased to such a degree that pitfalls had to be dug for their capture, and they had to be destroyed artificially, because the kestrels and other predacious birds and animals had been almost extirpated.

Other enemies to agriculture are also destroyed by the kestrel. Mr. Johns mentions an instance where the stomach of a kestrel was opened, and was found to contain, beside a field-vole, nearly eighty caterpillars, twenty-four beetles, and a leech!

Now, we will return to our field-vole. Like the squirrel and several other rodents, it makes two nests, one for the winter and the other for the summer.

The winter nest is mostly made at some distance from water, is formed at the end of a burrow, and seldom reaches more than a few inches below the surface of the ground. It is to this winter nest that the poet Burns refers in his exquisite stanzas addressed to a mouse whose nest had been destroyed by his ploughshare, and beginning,

"Wee, sleekit, cow'rin', tim'rous beastie."

Such, indeed, is the fate of many a winter nest. Supposing, however, that the creature should be snapped up by the kestrel while out in search of food, the nest will be deserted, but it will not be wasted. There are always beings who are glad to find a ready-made burrow which will save them the trouble of excavating one for themselves. Among them are several species of wasp and humble-bce, most of whose nests are made in the deserted burrow of the campagnol.

Here, again, is an example of the manner in which the life-histories of dissimilar animals

are linked together. Few persons would think that there could be any connection between the wasp and the kestrel, and yet our walk along the banks of our brook has shown us that such is the case, and that the connecting link is the campagnol.

Like the water-vole, the campagnol lays up a store of winter provisions, not in its livingroom, but in a chamber excavated for the purpose. The treasure-house sometimes contains a very miscellaneous store, the fruit of the hawthorn and wild rose being the staple.

Cherry-stones mostly form a large proportion of the stores, as many as three hundred having been found in a single chamber. The mode in which the campagnol obtains the cherry-stones would hardly be suspected except by those who are in the habit of watching the varied phases of animal life.

The chief purveyors of cherry-stones are the

blackbird and thrush.

Both these birds are exceedingly destructive among the cherry crops, as I know from personal experience. My study overlooks a number of fine cherry-trees, one of them being so close to the house that by leaning out of the window I can touch the fruit with an ordinary walking-stick. As soon as the fruit ripens, the thrush and blackbird hold high festival, eating the cherries from the branches and feeding their young with the ripe fruit.

It is really amusing to watch the proceed-ings of the birds, especially the unmerciful manner in which the young birds peck their parents when they considered that they are not fed fast enough. Neither young nor parent is in the least afraid of me as I sit at the open window, so that I can see every movement.

Sometimes the entire cherry is pulled off the branch, but when the fruit is very ripe the soft portion only is eaten, the stone still being attached to the stalk. In either case, the stone will be sure, sooner or later, to fall to the ground, whence it is picked up by the campagnol and added to its store for the coming winter.

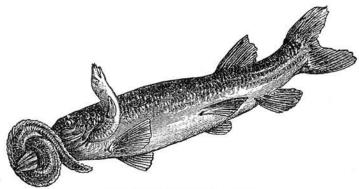
Here, again, is a link connecting together the life-histories of the blackbird, thrush, and campagnol. Furthermore, it affords an example of the care that is taken that nothing

on the earth shall be wasted.

Whenever a living being has no further use for anything which once was connected with its life-history, there is sure to be some other animal which wants it and is waiting for it.

We have already seen how the abandoned winter nest of the campagnol is utilised by the wasp or humble-bee, and we now see that when the blackbird and thrush have abandoned the cherry-stones as useless to them, there is the campagnol waiting for them and ready to carry them off to the storechamber which it has previously prepared.

Beside the winter nest, there is the summer nest, which is primarily intended for the reception and nurture of the young. This, like the corresponding nest of the squirrel, is made of slight materials and loose structure, so that



A PIKE STRANGLED BY AN EEL.

the air is freely admitted. It is generally composed of grass blades, which have been torn in strips by the campagnol. It is globular in shape, and is mostly placed on the ground, amid concealing grass or herbage.

There is, however, before me a photograph of the nest of a campagnol, which was discovered in a very remarkable position, and made of very unusual materials. It was found in a garden store-house at Castle Carey, by the Rev. W. Smith-Tomkins, Vicar of Durstow. He kindly sent me a copy of the photograph, together with the following description-

> " Bedford Villa, "The Shrubbery,
> "Weston-super-Mare.

"August 8th, 1886.
"This nest of the short-tailed field-mouse was found by me a few years ago on a heap of barley straw, which was used to cover a small store of potatoes. Its chief interest to the finder, in potatoes. addition to its beauty, consists in this. It was all manufactured out of one kind of raw material, namely, the leaves of the barley straw, which the maker shred up into thin threads according to her taste, so as to suit the different parts of the structure. There was no other material available for use.

"The mouse had found its way into the storehouse through a hole under the wall. I am sorry to say that she was killed when found, and before the nest had been used for its proper purpose. Two or three weeks before I had looked over the place, and she had not commenced operations.

"On referring to 'Homes without Hands,' I find it stated by Mr. J. J. Briggs that he could never find an entrance to the interior (the nests being closed up, as you say is the case with the nest of the harvest mouse). I infer from this, that it is due to its incompleteness that the entrance in this case is open and visible, and that its structure is therefore so open to inspection."

With the description and photograph Mr. Tomkins sent a few portions of the nest, some of the barley leaves being of their original width, and others split up into fibres as fine as ordinary sewing cotton. In a subsequent letter he states that the hele through which the campagnol made her entrance into the house opened into the stable yard of a neigh-

Its mode of eating the provisions which it stores is rather remarkable. It would naturally be supposed that, as other beings (including man) do, it would eat the thick, soft, and sweet exterior of the "hip" or fruit of the wild rose, and reject the hard, small seeds, with their fuffic excellent. with their fluffy envelope. But it does just the contrary, eating the seeds and rejecting the exterior.

When in America in 1884, I saw a flock or pine grosbeaks busily feeding upon the berries of the mountain ash at Worcester. Very pretty they looked, the rosy plumage of the two or three males contrasting boldly with the dark, sombre green of the many females. I should not have noticed them but for their

mode of feeding.

It was at the beginning of February-the very depth of a New England winter. I had to make my way up a rather steep hill, and over paths which, by reason of constant traffic over snow, were as slippery as ice. Many persons are in the habit of scattering sand or pulverised brick on the paths, and seeing, as I fondly thought, a few yards of the latter material, I gladly made my way towards it. To my disappointment-on that ground at least -- I found that the red material was not brick, but the soft, external part of the mountain ash berry, the birds only eating the seeds, and allowing the rest of the fruit to fall to the ground.

Then, the campagnol has a remarkable way

of eating the cherry stones.

When the squirrel eats a nut, it nibbles off a little piece of the sharp end, inserts the edges of its incisor teeth in wedge fashion, and splits the nut in two. The campagnol begins like the squirrel, but when it has bitten off the end of the cherry-stone, it does not split the shell asunder, but in some way of its own contrives to get the kernel out.

(To be continued.)





TABLE ETIQUETTE.

THE ETIQUETTE OF SMALL THINGS.



S I sat watching a crowd of men, women and children, in a fashionable New York restaurant the other day, I was reminded of an old saying (I do not know by whom), that "the man of intellect alone knows how to eat," and still another "we are but what we eat," and I wondered how many of the goodly company before me would resent any question as to their table manners; and yet at a table provided with every convenience, I saw a richly-dressed woman with every evidence of a lady, handle her knife and fork and napkin in a way that bespoke any thing but gentle breeding, while at another table a man took from his pocket a medicine bottle shook it, poured out a dose and swallowed it with

evident disgust. It was quite right that he should take his medicine but surely a person of fine feeling and with a regard for others would have done so in private, and it is at just such a time, that we should examine ourselves and see if we are as careful as may be, both at the home table, and while visiting or traveling.

For surely the man who allows his food to fall upon his garments, reaches across the table for some choice morsel, bolts his food, drains his tea cup, lolls at the table, picks his teeth in public, smacks his lips, sups up his soup, and has no idea or is neglectful of the proper use of a butter-knife, salt-spoon, sugar-tongs, or napkin, is to say the least, uncultivated.

And it is also impossible to think much of a person's manners, who orders everything, or nearly so, on a bill of fare at a public table whether he can eat it or not, and still less for those who can find "nothing fit to eat away from home," and are at the same time ready to devour everything that may be set before them.

All those who travel have met just such characters and wondered at them, so it then behooves us to be even more strict with ourselves away from home, than even with those who bear with us for love's sweet sake.

It is said that Cardinal Richelieu detected an adventurer who was passing himself off as a nobleman, by his helping himself to olives with a fork, because it was the custom then, as it is now to help one's self from the dish with the fingers, if an olive fork is not provided, rather than to use one of a different pattern. Forks for the dish alone are now manufact-

ured and are very generally used, but after the olive has reached the plate it is always carried to the mouth by the fingers. Of course we are not referring to the stuffed olives which are bottled in oil.

Those who are very particular hold the large end of a spear of asparagus with a fork while with the tip end of a knife they daintily separate the tender green tops from the white end, which is then put aside. Others take the white end between the fingers and carry it to the mouth. Both are correct, but the former is much more dainty and easily done.

The etiquette of eating a soft boiled egg has been the subject of more than one clever essay. The English custom is to eat it directly from the shell, when of course a small egg cup and egg spoon are necessary. The American way is to break the egg into a cup or glass by striking the shell in the center and turning the contents into the glass. In this case it is usually eaten with a teaspoon, as an egg spoon, unless extra large, would be too small, and we have seen the egg held by a corner of the napkin, but this is not only tiresome but difficult to do nicely, without soiling the napkin.

Celery is always taken from the dish and carried to the mouth by the fingers. If individual salts are not provided, it is etiquette to use one half of the butter plate for salt. If salt shakers are used, hold the celery in the left hand just over the rim of your plate and gently sprinkle it with salt, and the old custom of putting a spoonful of salt on the cloth is still in practice. When corn is served on the cob it must be taken in the fingers, only managed very daintily. We have seen pretty little doylies for the purpose of holding it, but it is a question if that is not carrying table linen too far. Many housekeepers, and especially in the South, serve corn as a separate course when finger bowls are placed by each plate and removed with the course.

Lettuce when served without dressing is always pulled to pieces with the fingers. This is usually the lady's duty and there is no prettier picture than that of a young lady preparing a plate of fresh crisp lettuce leaves in this way, for the tender green shows off to perfection her dainty white hands and she may be as exquisitely neat about it as she likes, and it is one of the most fascinating and becoming of table duties that a hostess can possibly provide for her lady guests, to assist in helping the gentlemen at a social or informal meal.

Water cress is also taken in the fingers and the prettiest way of serving it is to obtain a long low-sided basket or dish, in the bottom of which lay a folded napkin, then heap the cress so as to fill the basket and you have not only an enjoyable, but a very ornamental dish for the breakfast table.

When a slice of lemon is served with fish or meat it is much more correct to take the slice in the fingers, double the ends together and gently squeeze the juice over the article than to use a knife for that purpose, as is sometimes done.

It is always proper to help one's self to bread, cheese, and lump sugar, if tongs are not provided, with the fingers. Never use your own knife, fork or spoon to take from the dish. It is also correct if a plate of hot unbroken biscuits is passed, to not only break off for yourself with your fingers, but for your neighbor also. When things are passed, help yourself as quickly as possible, for you must not keep others waiting and never insist on some one else being served before you, if the host or hostess has honored you first.

I have seen a plate go the entire round of the table and finally reach the carver, from excessive politeness. This is, to say the least, annoying, for the carver is supposed to know just what each guest, or member of his family prefers and has taken the trouble to select that part for him, and it is always better to accept food when pressed to do so, rather than refuse, even if you do not choose to eat it. When sending the plate for a second helping, leave the knife and fork on the plate together at one side, and the teaspoon in the saucer. Never pile the dishes you have been eating from, and when finished leave your napkin unfolded on the table beside the plate, unless the hostess should fold hers, then you follow her example.

The hostess should always take the lead in everything, for if she has provided some new article of food, which she alone knows how to handle, or some new dish or piece of silverware, which she alone knows how to use, it is not only thoughtful, but just that she should be the first to use it, or in other words if you do not understand the use of what is set before you and are not familiar enough to ask, wait until some one sets the example. It is always better to frankly express your ignorance on the subject than to use the article wrongly or to seem to be afraid of it. Many of us can remember the funny feeling we had when handed the little pepper mills, introduced a while ago, and told to grind our own pepper without knowing which way it turned. It is a good plan to visit the furnishing stores every few months and ask to see anything new that they may have for table use, even if you do not wish to purchase.

"I always tell my friends that these little plates are for bread" said a young housekeeper to a lady who was lunching with her and who had inadvertently used the plate for potato skins. In this case the explanation was scarcely polite, for the hostess had not provided for the potato skins and her guest was doing what was not only thoughtful but tidy, for the skins might have soiled the cloth while there was no danger of the bread doing so. But if the guest had noticed she would have seen her hostess put the skins back into the dish from which she had taken the potatoes, a questionable neatness.

In England as soon as a person is helped he begins to eat; here we wait for the hostess to set the example. It is not correct to ask for a second helping of either soup or fish. And it is much more dainty to break bread than to cut it after having taken a slice.

Do not express your preference for any special morsel, and never apologize for an accident, or appear to see anything out of the way, or disagreeable.

Soup is taken from the side of the spoon noiselessly.

When asked if you will be served with this or that, say no or yes at once; try not to hesitate.

Do not crumb your bread or disarrange the plates and articles in front of you. Keep them in order, as much as possible, and never be so rude as to request the waitress, if you are in need of ice or water or anything. Address the hostess and she will see that your wants are attended to.

Be careful not to interrupt others to express your own opinion, or talk with your mouth full. If you are so unfortunate as to be a dyspeptic, do not say so, but take quietly your share of the meal and seem to eat even if you do not. A clever person can appear to be very busy with only a slice of bread.

If wine is served and you do not wish it, there are two ways

of refusing. Let your glass be filled and do not touch it, or turn your glass upside down, then your hostess will understand that you do not wish it (or she ought to). Never express your views on the subject at such a time, your actions are sufficient. It is not given to us all to be talented, or lovely, or rich, but we can all be gentle and well-mannered.

And no one can tell how far they may influence others, for as the Scotch say "a word" (and a look) "gangs speirin lang after it's oot o' sicht and its answer may com back frae far."

-Mary Barr Munroe.

THE OLD FIRE-PLACE.

The blessed old fire-place! how bright it appears
As back to my boyhood I gaze,
O'er the desolate waste of the vanishing years,
From the gloom of these lone latter days;
Its lips are as ruddy, its heart is as warm,
To my fancy, to-night, as of yore,
When we cuddled around it, and smiled at the
storm,

As it showed its white teeth at the door.

I remember the apple that wooed the red flame,
Till the blood bubbled out of its cheek;
And the passionate pop corn that smothered its
shame.

Till its heart split apart with a shriek;
I remember the Greeks and the Trojans who
fought

In their shadowy shapes on the wall, And the yarn, in thick tangles, my fingers held taut,

While my mother was winding the ball.

I remember the cat that lay cozy and curled
By the jamb, where the flames flickered high,
And the sparkles—the fire-flies of winter—that
whirled

Up the flue, as the wind whistled by;
I remember the bald-headed, bandy-legged tongs,

That frowned like a fiend in my face, In a fury of passion, repeating the wrongs They had borne in the old fire-place.

I remember the steam from the kettle that breathed

As soft as the flight of a soul,

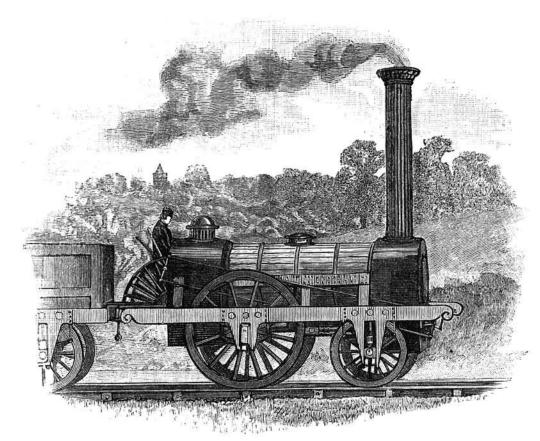
The long-handled skillet that spluttered and seethed

With the batter that burdened its bowl;
I remember the rusty, identical nail,
Where the criminal pot-hooks were hung.
The dragon-faced andirons, the old cedar pail,
The gourd, and the peg where it swung.

But the fire has died out on the old cabin hearth,
The wind clatters loud through the pane,
And the dwellers—they've flown to the ends of
the earth,

And will gaze on it never again;
A forget-me-not grows in the mouldering wall,
The last, as it were, of its race,
And the shadows of night settle down like a pall
On the stones of the old fire-place.

-Omaha World.



PASSENGER ENGINE BY STEPHENSON, 1831.

LOCOMOTIVES ON THE LINE.



HERE were locomotives before the line—as we know it—was begun. Trevethick and Blenkinsop had completed their locomotive engines between seventy and eighty years ago; and Hedley's "Puffing Billy," the oldest engine in exist-

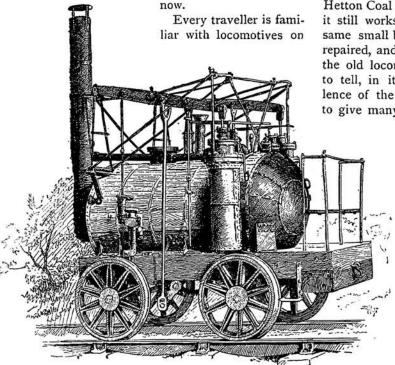
ence, did duty three-score years and ten ago. But it was not until the year 1825 that the first public railway in the world was opened, and thus it is that locomotives on the line date from that year. On the 16th of September, 1824, an order was given to the then young firm of Robert Stephenson and Co., to construct two locomotive engines "for the sum of £500 each." The earliest delivered of these is now placed on a pedestal near Darlington Station, and it is the parent of "locomotives on the line." It differed widely from the engines we know; its weight was about a tenth of the heavy engines of to-day; it drew a gross load of forty tons, at a speed not exceeding twelve miles per hour, and its cylinders were perpendicularly placed. The story of this early locomotive, of its completion in the old factory on Tyneside, of its being sent by the great road to the south, drawn by horses, and raised on the line near the village of Great Aycliffe-that story is well known. After this came, in due time and order, "Hope," "Black Diamond," "Diligence," and the "Royal George"-the first four were Stephenson's engines,

and the latter was Timothy Hackworth's. Not alone in dimensions, but in mode of construction and in powers of endurance, these old travellers on the line differed from those of to-day. In the workshops there were no tools except hand-lathes; there were no turn-tables, only ropes and pulleys for the lifting of the engines, and the "screw-jack" was the sole means of raising the locomotive, so that the work of construction was slow. One of the oldest engineers told the writer that the wheels were metal with iron tyres, and for repairs they were hammered on and off, as the one way of removing and refitting them. At one time, out of twenty-two locomotives on the primal line, fifteen were off work for repairs. The story is told of how the engine-drivers dealt with the refractory or worked-out engines: in "slippery weather or on some long greasy incline the speed would flag rapidly; the engineman, first lavishing oil on the rods and bearings, and then forcing the wheels round with a crowbar, would cry out to the fireman, 'Give it to her, Bill, man; give it to her,' as Bill with his shovel strode alongside, frantically scraping up small ballast, and dashing it before the wheels to make them bite," vainly. Then the fire was roused up, and the engineman and fireman sat down on the side of the bank until "steam rose, and off she went."

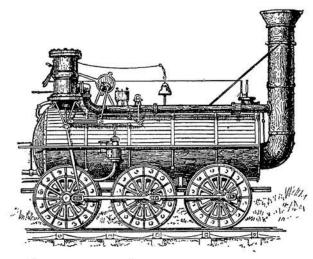
There are local stories told as to the esteem and the mystery that surrounded these early locomotives in the popular estimation. On the occasion of the opening of the first railway, an attentive Durham man regarded "Locomotion" with anxious care, and finally concluded in the country Doric, "I's warrant she gans by smoak," whilst one in a higher social sphere inquired of one of the projectors of the line, who had his hand on the side-bar, if that was the motive-power.

This was in the early days of railways, when passenger carriages were not trusted to locomotives, but to horses: when a bell or trumpet was used for signalling purposes, and when the banks of the Tees had the only public railway in the world. As time passed on, the railway system grew, the number of engines and engine-builders increased, and the competition at Liverpool determined for a time the use and the form of the locomotive, and decided also its value for other purposes than haulage of coal. For it is remarkable that coal-transit brought into being the engine: on a coal line, in 1804, one of Trevethick's engines ran; on "Middleton Coal Railway, near Leeds," Blenkinsop's engine worked; and at Wylam and Killingworth collieries, Hedley's and Stephenson's But the use of the engine for engines worked. passenger traffic caused the need for speed as well as strength, and gradually the locomotive was made more compact, the stroke shorter, the number of tubes was increased, the consumption of fuel was diminished, and the multitubular boiler became common. The old locomotive has disappeared from the line-one is "laid up in lavender" at Kensington; a second guards the northern bank of the Tyne, and, close to the high-level bridge and to the old castle, is a connecting link between the distant past and the present; and a third, as we have said, is mounted on a pedestal at Darlington, once the brain and the pulse of the railway system. But, with one ex-

ception, none are in use



ONE OF THE EARLIEST LOCOMOTIVES-" PUFFING BILLY."

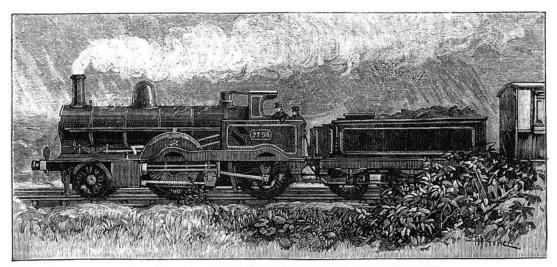


"THE ROYAL GEORGE" AS REMODELLED BY HACKWORTH.

the line in our day, and those whose journeys are fairly frequent can tell the dark London and North Western engines before they see their names, can contrast them with the light hues of those on the Brighton line, or the ruddy-brown of the Midland, or the green of the Great Northern. Experts, too, can pick out the rather ponderous express of the North British from the splendid ones that do the best duty on the North Eastern; whilst the special features of the Crewe compounds, the bogie engines that do duty on some of the dale lines, or those of the "Lord of the Isle" class which run long distances, scooping up the water they need whilst flying along—these are all determinable easily at a glance.

We have named an exceptional old locomotive still at work. One of the first four engines built for the primal public railway was sold years ago to the Hetton Coal Company, and on the line of that company it still works. It has the old upright cylinders, the same small body, and, though parts are renewed and repaired, and some slight alterations have been made, the old locomotive remains, after sixty years' work, to tell, in its wheezy puffs, the story of the excellence of the work of its builders. It would be easy to give many stories of the drivers of the old loco-

motives-of those who, in days when "Time-tables" were not, regularly stopped at one prolific field to gather mushrooms; of the straight-spoken engineman who, when remonstrated with for "racing" at the rate of fourteen miles per hour, averred that he would keep up to that rate if he "burst the boiler;" and of the Northcountryman who, not a score of years ago, declined to join in a strike because of his attachment to the engine he drove, and he "couldn't trust her" to a stranger. But the service "on the line" has been systematised now, and whilst the convenience of the public has been consulted, the idiosyncrasies of locomotive builders and drivers have



CREWE COMPOUND HIGH AND LOW PRESSURE EXPRESS ENGINE.

gone. The construction of the engine is no longer confined to one small establishment at Newcastle, nor the repairs to a "barn-like erection" at Shildon, in Durham, as was the case in 1825. The Tyne is no longer the chief of constructing centres - Manchester and Glasgow are its rivals, as far as private builders are concerned; and Crewe with its wonderful works, Derby, Doncaster, Manchester, Swindon, and other places, are the centres of the works of those great companies which chiefly build their own iron There can be no greater contrast than that steeds. of a picture of the first engines, and that of one of to-day; but changed as are the dimensions and altered the position of the parts, and increased the speed and weight, the cost and the strength, yet the thousands of locomotives on the line now in every land are in the main principle what they were when George Stephenson was "first railway engineer" at a salary of £300 per annum, at a time when his broad North-umbrian dialect puzzled the committees of the Commons House, when his son Robert was engineer to the Hetton Coal Company, and when Hackworth was practically a foreman in some small engineering works, and the whole of the engine-building and repairing operatives in the world did not number 180. And those who travel on the line, and those who compare the modes of travel of the present and the past, would wisely give credit to the early engineers whose constant care and experiment and work brought to its present perfection the chief means of land travel.

I. W. S.

THE KITCHEN TABLE.

Some Delicious LAYER CAKES.

The following choice recipes for layer cakes "have been weighed in the balance and not found wanting." They are my own, not copied from cook books, but tried and true.

The Queen of Cakes.

Ten eggs (whites only), one and a half tumblers of pulverized sugar, one tumbler of flour, one teaspoonful of cream of tartar, one teaspoonful of vanilla. Stir the whipped whites and the sugar together, then barely stir in the flour, in which the cream of tartar has been sifted. Bake in two jelly tins in a pretty warm oven. For filling, take one pint of sweet cream a day old. Whip till very light with an egg beater. Blanch and chop a pound of almonds. Stir into the sweetened whipped cream, and put on the top and between the layers. Before commencing to whip the cream, be sure it is very cold, and do not attempt it in a warm room. This is a perfectly delicious cake.

Maple Caramel Cake.

The whites of four eggs, nearly half a cupful of butter creamed, one cupful of sugar, two cupfuls of flour, half a cupful of sweet milk, half a teaspoonful of soda, and a generous teaspoonful of cream of tartar. When you begin to make your cake, put in a new tin basin a cupful and a half of maple sugar, a cupful of sweet cream and a tablespoonful of butter. Let this boil gently for forty minutes, flavor with a teaspoonful of vanilla and spread between the three layers, and on top. If you do not have the maple sugar, brown sugar is very nice. For those who are fond of maple caramels, this is exceedingly nice, as the caramel taste is all through the cake.

Rose (Cocoanut) Cake.

For the white part, make as for caramel cake, except the layers must be thicker, as there are but two white layers and one pink. For the pink layer take whites of two eggs, one-fourth of a cupful of butter, half a cupful of sugar, one teaspoonful of cream of tartar and one-half of soda. Buy three cents' worth of the little red imperial candies (be sure they are flavored with cinnamon). Put them into a fourth of a cupful of sweet milk. When the pink coloring has come off pour the milk into the batter. Do not wash your cocoanut, but wipe dry after cutting off the brown part. Put in the oven for a while, grate and it will be light and fluffy. Make an icing of the whites of three large eggs and enough pulverized sugar to make a soft frosting. Season with rose water or vanilla. Ice each layer thickly, and spread over it the grated cocoanut. Put the pink layer between the two white ones. This cake is so exceedingly handsome and delicious that it has many admirers.

Ambrosia Cake.

Having made three layers of white cake, take for the filling onehalf cupful of butter, one cupful of sugar and the juice of one lemon. Cook until the consistency of honey. Spread between the layers as in jelly cake. Far superior to custard or cream cake, as the lemon gives it an individuality of its own.

Hickory Nut Layer Cake.

Bake three layers of nice white cake. Take whites of three eggs, four cups of pulverized sugar. Beat the whites, add the sugar and season to taste. Put a thick layer of icing on each cake and cover with nut meats. Ice both sides of the cakes, as they hold together better. Also the top of the cake. An exceedingly rich cake.

-Annie Curd.

Janitors I Have Met, and Some Others

By Albert Bigelow Paine

II.— METROPOLITAN BEGINNINGS

WE set out gayly and early, next morning, to buy our things. We had brought nothing with us that could not be packed into our trunks except my fishing rod, some inherited bedding and pictures which the little woman declined to part with, and two jaded and overworked dolls belonging to the precious ones. Manifestly this was not enough to begin housekeeping on, even in a flat of contracted floor-space and limitless improvements. In fact the dolls only had arrived. They had come as passengers. The other things were still trundling along somewhere between Oshkosh and Hoboken, by slow freight.

We had some idea of where we wanted to go when we set forth, but a storehouse with varied and almost irresistible windows enticed us and we went no farther. It was a mighty department store and we were informed that we need not pass its doors again until we had selected everything we needed from a can opener to a grand piano. We didn't, and the can opener became ours.

Also other articles. We enjoyed buying things, and even to this day. I recall with pleasure our first great revel in
a department store. For the most part
we united our judgments and acted
jointly. But at times we were enticed
apart by fascinating novelties and selected recklessly, without consultation.
As for the precious ones, they galloped
about, demanding that we should buy
everything in sight, with a total disregard of our requirements or resources.

It was wonderful though how cheap everything seemed, and how much we seemed to need, even for a beginning. It was also wonderful how those insidious figures told in the final settlement.

Let it be understood, I cherish no resentment toward the salesmen. Reflecting now on the matter, I am, on the whole, grateful. They found out where we were from, and where we were going to live, and sold us accordingly. I think we interested them, and that they rather liked us. If not, I am sure they would have sold us worse things and more of them. They could have done so, easily. Hence my gratitude to the salesmen; but the man at the transfer desk remains unforgiven. I am satisfied, now, that he was an unscrupulous person, a perjured, case-hardened creature whom it is every man's duty to destroy. But at the time he seemed the very embodiment of good intentions. He assured us heartily, as he gave us our change, that we should have immediate delivery. We had explained at some length that this was important, and why. He waved us off with the assurance that we need give ourselves no uneasiness in the matter-that, in all probability, the matting we had purchased as a floor basis would be there before we were. He knew that this would start us post-haste for our apartment, which it did. We even ran, waving and shouting, after a particular car when another just like it was less than a half block behind.

We breathed more easily when we ar-

rived at our new address and found that we were in time. When five minutes more had passed, however, and still no signs of our matting, a vague uneasiness began to manifest itself. It was early and there was plenty of time, of course; but there was something about the countless delivery wagons that passed and repassed without stopping that impressed us with the littleness of our importance in this great whirl of traffic, and the ease with which a transfer clerk's promise, easily and cheerfully made, might be as easily and as cheerfully forgotten.

I said presently that I would go around the corner and order coal for the range, ice for the refrigerator, and groceries for I added that the things from down town would surely be there on my return, and that I wanted to learn where the nearest markets were anyway. I known it I need not have taken this trouble. Our names in the mail-box just outside the door would have summoned the numerous emissaries of trade. as by magic. It did so, in fact, for the little woman put the name in while I was gone, and on my return I found her besieged by no less than three butchers and grocerymen, while two rival milkmen were explaining with diagrams the comparative richness of their respective cans and bottles. The articles I had but just purchased were even then being sent up on the dumb waiter, but our furnishings from below were still unheard from. A horrible fear that I had given the wrong address began to grow upon us. The little woman was calm, but regarded me accusingly. She said she didn't see how it could be, when in every accent of her voice I could detect memories of other things I had done in this linethings which, at the time, had seemed equally impossible. She said she hadn't been paying attention when I gave the number or she would have known. Of course, she said, the transfer clerk couldn't make a mistake putting it down — he was too accustomed to such things, and of course I must have given it to him correctly — only, it did seem strange —

We began debating feverishly as to the advisability of my setting out at once on a trip down town to see about it. We concluded to telephone. It hastened around to the drug store not far away and "helloed" and repeated and fumed and swore in agony for half an hour, but I came back in high spirits. The address was correct and the delivery wagons were out. I expected to find them at the door when I got back, but found only the little woman, sitting on the doorstep, still waiting.

We told each other that after all it must necessarily take some little time to get up this far, but that the matting would certainly be along presently, now, and that it would take but a short time to lay it, and then we would have a good start, and even if everything didn't come to-night it would be jolly to put the mattresses down on the nice clean matting, and to get dinner the best way we could -like camping out. Then we walked back and forth in the semi-light of our empty little place and said how nice it was, and where we should set the furniture and hang the pictures; and stepped off the size of the rooms that all put together were not so big as had been our one big sitting room in the West.

As for the precious ones, they were wildly happy. They had never had a real playhouse before, big enough to live in, and this was quite in accordance with their ideals. They were "visiting" and "keeping store" and "cooking," and quarreling, and having a perfectly beautiful time with their two disreputable dolls, utterly regardless of

the shadow of foreboding and desolation that grew ever thicker as the hours passed, and the sun slipped down behind the steep stone-battlemented park opposite, and brought no matting, no furniture, no anything that would make our little nest habitable for the swiftly coming night.

But when it became too dark for them to see to play, they came clamorously out to where we stood on the doorstep, still waiting, and demanded in one breath that we tell them immediately when the things were coming, where they were to get supper, how we were to sleep, and if they couldn't have a light. was glad that I could give them some-I said that it was pretty early for a light, but that they should have it. I went in and opened a gas burner, and held a match to it. There was no result. I said there was air in the pipes. I lit another match, and held it till it burned my fingers. There was air in the pipes, I suppose, but there was no I hurried down to inform the She was a stern-featured Hibernian, with a superior bearing. learned later that she had seen better days. In fact, I have yet to find the janitor that hasn't seen better days, but this is a digression. She regarded me with indifference when I told her there When I told her that we was no gas. wanted gas, she inspected me as if this was something unusual and interesting in a tenant's requirements. Finally she said: -

- "Well, and when did yez order it turned on?"
- "Why," I said, "I haven't ordered it at all. I thought"—
- "Yez thought you could get it of me, did yez?"

I admitted that this seemed reasonable, but in view of the fact of the water being turned on, I had really given the matter of gas no definite consideration. I think she rather pitied my stupendous ignorance. At least she became more gentle than she had seemed at the start, or than she ever was afterwards. She explained at some length that I must go first to the gas office, leave a deposit to secure them, in case of my sudden and absent-minded departure from the neighborhood, and ask that a man be sent around to put in a meter, and turn on the gas in our apartment. With good luck some result might be obtained by the following evening. stumbled miserably up the dark stairs, and dismally explained, while the precious ones became more clamorous for food and light, as the shades of night gathered. I said I would go and get some candles, so in case the things came - not necessarily the matting we didn't really need the matting first, anyway - it would get scuffed and injured if it were put down first - it was the other things we needed — things to eat and go to bed with -

When I came back there was a wild excitement around our entrance. A delivery wagon had driven up in great haste and by the light of the street lamp I recognized on it the sign of our department store. A hunted looking driver had leaped out and was hastily running over his book. Yes, it was our name—our things had come at last—better late than never! The driver was diving back into his wagon and presently hauled out something long and round and wrapped up.

- "Here you are," he said triumphantly. "Sign for it, please."
- "But," we gasped, "where's the rest of the things? There's ever so much more."
 - "Don't know, lady. This is all I've

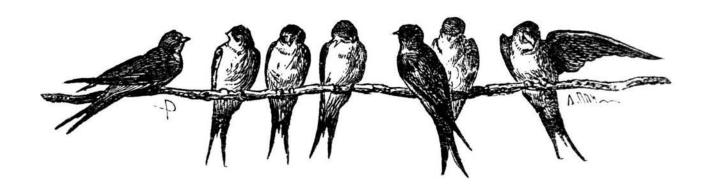
got. Sign, please, it's getting late."
"But"——

He was gone. We carried in our solitary package and opened it by the feeble flickering of a paraffine dip.

It was a Japanese umbrella-holder!

The precious ones and their wretched dolls held a war dance around it and admired the funny men on the sides. To us it was an Oriental mockery.

Sadly we gathered up our bags, and each taking by the hand a hungry little creature who clasped a forlorn doll to a weary little bosom we set forth to seek food and shelter in the thronging but pitiless city.



"NOTHING BUT SPARROWS AND BLACKBIRDS."

AVE you many birds in your neighbourhood?"

"No; nothing but sparrows and blackbirds."

This was a question once asked, and an answer received, from a person found sitting on a stile in a leafy lane in the Midlands, with whom I had casually entered into conversation. The question was suggested by our surroundings. The air was overflowing with the songs of birds and the hum

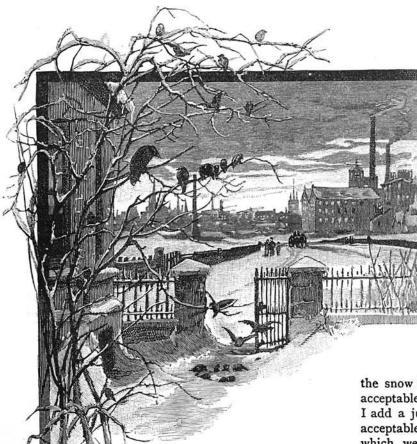
of insects, for it was the glorious early summer-time. Trees and hedges, the thick growth of herbage in the ditch, and the broad border of grass that stretched to the waggonwheel ruts were all full of movement and life.

* * * * * *

It is now winter, and I have been for some months a resident in the very neighbourhood referred to in the above scrap of conversation. Though my chance acquaintance of that summer day's stroll spoke in perfect good faith, his words suggested in their very matter hesitancy of belief, for blackbirds are not such frequenters of human habitations, such lovers of human society, as to be found along with the sparrows in localities from which other birds have been driven by the activity and noise, the bricks and mortar, of men. They are birds of a rather retiring disposition, have something of the awkwardness of shy persons; and though they do indeed build in the grounds at-

tached to gentlemen's houses, it is in the country or well on the outskirts of a town, and where they are kept in countenance by a considerable variety of feathered fellow creatures. "Nothing but sparrows and blackbirds" did not commend itself to belief as a true account of the case; but I have found that in this part of the country the name "blackbird" is commonly given to the starling. It was this bird that my acquaintance meant, though at the time I did not know or even suspect it. "Starlings and sparrows" is a more congruous combination, for both these birds enjoy an hereditary right to human service. Has it not been handed down in their traditional lore that men have been created and taught the art of architecture for the express purpose of providing spouts and gutters in which the sparrows may build their nests, and chimneys to make up for a deficiency of hollow trees in providing a like convenience for the starlings?

Even where I live—which, fortunately for me, as a lover of the country, is a little outside the town—a not too curious observer might be excused for seeing nothing but sparrows and starlings. These he would see on the roofs and in the fields around, and probably these only. We are proud of our factory chimneys, and complacently watch the black smoke issuing from them that tells of busy industry. When some satisfactory method of consuming it has been invented and commends itself to the manufacturing mind, we shall be glad to see an abatement of "the smoke nuisance." But we desire no return of the terrible days of the cotton famine, when all the mills



were stopped and the sun shone

brightly, and the sky was blue,

and the air was pure, and-men

and women and children were

starving! No; we glory in

these tall chimneys and their

BREAKFAST-TIME.

dusky plumes streaming in the air. At the same time, we do not claim for them any special beauty, nor do we deny a pollution of the atmosphere. But worse than the smoke, though less obvious to the eye, are the fumes of certain chemical works. The evidence of their deadly power is to be seen in the gradual dying of our trees and in the hopeless colour of our grass.

But the sparrow takes no exception to such things as He rather shares the pride of his human friend in his restless industry, though he continues to associate with him at some cost to his personal appearance-for the sooty little bird that frequents the streets of a Lancashire town is blackened almost out of all likeness to his brother of a Kentish or Sussex homestead. The starling, too, stands by us, even though we build factories and defile the atmosphere. The fields around my house afford him exercise and, presumably, food, for he spends a good deal of his time in them, while my chimneys are one of the selected spots for the establishment of his nurseries. as I discovered to my inconvenience more than once last summer when a bird of full size, but evidently not of mature judgment, came down into the room, bringing with him soot and confusion that I could well have spared.

But it is winter now. The frost has sealed the

ground, and the snow has followed. "Only sparrows and blackbirds." Truly we have nothing to compare with the feathered wealth of the Midland woods, but in the little enclosure before my window-which some of my friends kindly call a garden-I am proving to-day how inadequate an account of our bird life is that answer. The snow is swept away from the path, and a generous gift of bread-crumbs scattered on it out of regard for the conventionalism of such charity. For have not bread-crumbs been the staple eleemosynary dole for bird dependents since the ancient "time whereof the memory of man runneth not to the contrary?" And who am I that I should turn reformer, and know better than my fathers? Besides, bread-crumbs are cleanly and easy things to collect from the breakfast table, and when

the snow is on the ground prove not altogether unacceptable. But while thus paying tribute to custom, I add a judicious supply of suet, as being yet more acceptable, and as affording that oleaginous element which we are taught is so expedient in the cold weather.

Well, here are indeed the sparrows, discussing the crumbs, and here are the starlings, settling in the remnants of what was once a strong quickset hedge around a garden, and is now a decimated rank of hawthorn bushes guarding a discouraged grass-plat. They have soon found out the suet fixed in the forks of the twigs, and their neat sharp beaks are promptly busy. But here is a visitor. I should know that movement, yet who can recognise in that grimy ball of feathers the little blue-tit that ought to be sporting a uniform of blues and greens and yellows? Nevertheless, it is he. And he has not come far. His appearance testifies that he has been living for at least some time in a smoke-charged air. What has he lived on all the summer? Insects do not abound; the crevices in which he would seek them are choked with soot. And what does he live on in these winter days? Surely his struggle for existence has been a fierce one! But he is happy just now, as he toys with a morsel in the pathway, then slips into the hawthorns to investigate what is wedged between their branches and fixed upon their thorns. And now here comes a robin, with a confident carriage that a gamecock might envy. Neither sparrow nor starling expect an apology from him for hopping into the very centre of their circletaking the head of the table, as one might call it. In striking contrast with his bold, cavalier-like attitude is the gentle, ladylike movement, full of grace, though free from all timidity, of the little hedgesparrow, which we are constantly being told is not a sparrow at all, and ought not to be called such, but which most assuredly will be called such till an alter-



They mean no harm, but their bulk is an offence to robins, sparrows, and birds of their size. One of them is now appropriating a store I wedged into the fork or a dead tree stump with a special thought of his necessities, for when I was distributing my benefaction I noticed him-or his fellow-intently watching me at a distance of less than twenty yards. In agricultural counties, where there is much arable land, and where the rook is shot at, and, when shot, hung by one leg to swing ignominiously and warningly in the field, he is a shy bird. In such localities it would be vain to provide for his coming into your garden within six yards of your window. But I had already discovered how much less suspicious is the Lancashire rook, and thought it not unlikely he would come. And I am not disappointed. He has come, and his brother with him, although the manner of the brother is not altogether free from nervousness. He does little more than parade the fence, and watch the bolder birds enjoying the food spread below.

OF A TWIG.

on the fence.

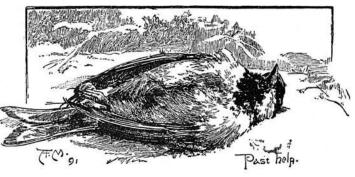
And now the number of the starlings is increasing, and among them is a strange-looking bird. His movements are not those of a starling, who walks—having learned the art, perhaps, from the rook—and bettered the instruction, for he certainly has a more respectable gait than the larger bird. But this strange bird hops, and that none too well; yet he has the form and colour and almost the size of a starling, though

coming short a little in this last particular. Poor bird! He is a starling, truly, but he has lost a leg. How, it were idle to surmise: clearly there are troubles and accidents in starling households. But among the new comers is a yet more pitiful object -a poor, blackened, and obviously feeble, thrush. His feathers are all puffed out as though to keep the cold air at as great a distance from his body as possible, and his legs seem to lack the strength to keep his body off the ground. He flops along in sad contrast with the lively spring that we see in the summer days when he is busy on the garden lawn worm-pulling. The sparrows make way for him as he clumsily, helplessly flops, as I have called it, in among them. They cannot surely be moved by fear of such a creature; let us believe that they respect his wretchedness. They are Sir Philip Sidneys, who say, "Thy necessity is greater than ours."

And now he goes up on to the branch of the tree overhead, and sits there "all of a heap." I rejoice that he has had a meal-a good one-though, from his looks, I fear relief has come too late. Privation has already done its work, and next spring will miss his song. Let him rest while he may, however, undisturbed. But I have to go into town, and so must, perforce, disturb him by opening the door and passing under the bare bough on which he sits. With the indifference of despair, he sits on and takes no notice. On my return-in about an hour's time-he is still there. And now his mate is on the ground, and, to my surprise, there is a blackbird come to join the number of my friends; not a starling this, passing himself off for the songster, but a true blackbird-"the ousel cock so black of hue "-the merle-turdus merula. He flies away as I come in at the gate, but I am glad to see, as I look from the window a little later, that he has returned.

Clearly this smoke-poisoned district possesses feathers of more varied hue than all suspect, though it does its best to disguise the variety in a smoky uniformity of colour. In my summer rambles in the neighbourhood I had found that, notwithstanding all unfavourable circumstances, "sparrows and blackbirds" did not sum up all its bird wealth, and now, to-day, a little outdoor relief is demonstrating the same fact at my own doorstep. If the frost continues there will be further proof to-morrow.

ALFRED J. BAMFORD.



ON THE "UNDERGROUND."

BY F. M. HOLMES.



OW, then, there! Any more goin' on!" Bang, slap, crash!

With great vehemence the carriage doors are slammed, and the smart little engine, quickly gathering speed, whirls the train almost out of the station before the late passenger, madly plunging down the stairs, reaches the gate to the platform.

To his breathless expostulations the phlegmatic porter only replies:

"'Nother train presently," clips the ticket, and mysteriously disappears.

If he is wise—which he seldom is—the impatient passenger will engage his gigantic intellect with the tablet advertisements so choicely decorating the grimy station walls, or he will examine the contents of the book-stall, or quietly and unostentatiously observe his fellow-travellers.

But the impatient passenger is not wise. He frets and fumes, exclaims against the bad air of the "Sewer," as the Underground Railway is politely termed—worries about the consequence of not being able to keep his appointment, through those wretched trains—wishes he had taken a 'bus—in short, forgets altogether the spirit of the line, by some poet unknown, that "quiet ways are best."

Because, of course, the next train that comes fussing and bustling to the platform is not the train he wants. We never do get what we want in this life, but unmindful of this interesting fact, and also that the true philosophy is to make the best of what we have, our impatient passenger still fumes and frets, until at last, amid the maze of Inner Circles, Putneys, Hammersmiths, Kensingtons, and other trains, he finds his seat.

He is one of those people who travel first-class on the Underground. By 'bus, tram or boat he has to mix with all sorts and conditions of men, but by the Underground he can actually cut himself off from them on luxurious cushions for a minute or two! No second-class will serve his turn, though why the authorities will not adopt the sensible arrangements of the Midland, and refuse to weight their trains with three classes, is a puzzle.

Surely Londoners do not want to be perpetually sorting themselves into three classes for a few minutes' travel! The consequence is that the third are usually densely crowded, while many of the first are empty. One would think that two classes would really afford ample accommodation for the short journeys and lighten materially the weight of the train.

But our impatient passenger bestows himself in the first—because there is not a "firster." He has his reward. The powerful little engine pulls up sharp at the next station, a passenger alights, away steams the train again with breathless eagerness, and oh! horror of horrors! the impatient passenger is left alone with a lady!

Is she an adventuress?

Out of the sides of his eyes he looks with fear and trembling, and catches a similar sidelong glance out of her eyes at him.

"Is he a brute?" she is saying to herself.

They have caught one another's surreptitious looks, and instantly the faces are twitched round and survey the interesting prospect of the dark tunnel walls without.

"Never mind!" mutters the impatient passenger, "we shall soon arrive at the next station." Jerk! the train stops dead. The signals are against it, and here are the two unfortunate passengers, suspicious of each other's company, shut up together! How dull and distant sounds the roar cf London. Again the lady steals a sidelong glance at her companion. He is still studying the tunnel wall or buried in his daily paper.

She is quite reassured. He does not seem a brute after all; her purse is quite safe. Her delicately gloved fingers grasps her ivory-handled—or her stalwart-sticked husband-beater—umbrella less firmly. She will not need to use it. Jerk! On steams the train again and quickly they are whirled from solitude to bustle.

The impatient passenger keeps his appointment after all; the phlegmatic porter was quite correct, there was another train in a few minutes, though they seemed hours to him, and at the expiration of the day, after a satisfactory dinner—impatient no longer—he renews his faith in the Underground.

Everybody uses it. The Londoner who has not at some time or other been whirled along its tunnels must be a rarity. It is in a sense a microcosm of London itself; for all classes may be seen in its trains. There may be a few superior beings who, rolling in wealth, roll also in their carriages, and disdain even the padded firsts of the Underground; but even they must at some time have used it, if only to see what it was like.

The workmen use it, so to speak, in their thousands; and no wonder, considering the facilities granted by workmen's tickets. The Metropolitan Company, who own the largest part of the Underground, greatly extended the system of these tickets last June (1892). The fares are very low and the hour up to which the tickets can be bought was extended to 7.30 a.m. The issue of the tickets ranges from St. Mary's, Whitechapel, in the east, to South Kensington, in the west, and northward to Harrow-on-the-Hill.

Book to Bishopsgate, on the Underground, on a Saturday afternoon, say at half-past two or three, and

watch the workmen stream out of the train into the subway connecting the station with the Great Eastern terminus, thence to be whirled away to Walthamstow or Tottenham; or in the early morning, before London is half awake, make your way down to St. Mary's, Whitechapel, or to Aldgate, and see how the workmen of all kinds use the Underground; you may gain some idea of one of the myriad phases of London's many-featured life.

Then, fly round the iron circle-for the main Metropolitan and its rival and yet ally, the Metropolitan District, form together a circle of railway (though not a very geometrical one) around inner London-fly round, and as the day advances notice how more of the leisured and fewer of the industrial classes come into the trains. The good folk then appear who need not reach their offices until nine or ten, or even later. Then come the ladies who are going shopping, or who visit the stores, or who are flying along to see their dearest friend. All classes use the Underground, and if a drunken man or woman should be in the carriage, all boycott him most rigorously. The offending one might be miles away, for all the notice taken. Some may lift their noses high in the air, others bend them pensively to the floor, others gaze thoughtfully straight ahead. The result is the same; the ignoring of the obnoxious one—of any kind—is complete.

At night you see the tired boy fast asleep in a corner after his work, then crowds returning from places of amusement, and at last the Underground, like the huge city it serves, grows a little quieter for a short time. But only for a short time, and the trains soon begin again to run their almost ceaseless round.

So much is it used that contempt of the man who proposed it seems curious now. Yet the idea was treated with great contempt. No end of objections were raised and opposition offered. History is not altogether silent as to the name of the bold man who proposed the audacious idea. Mr. Charles Pearson should be remembered prominently in connection with the scheme, even as is George Stephenson with the improvement of the locomotive and of the railways themselves.

Something was wanted to facilitate the growing traffic of the streets, and the question arose, What was to be done? Why not run a railway underground! was suggested. Of course the croakings were terrible. The croakers had a fine field-day and made their sweet voices heard with a vengeance.

They generally do. Well, well, we must not be too hard on the croakers. Why, I am a croaker myself—sometimes; that is, I do not scruple to criticise schemes of which I do not approve. Every Englishman does the same in this dear land where "Each may say the thing he will!" And quite right too! Sound criticism is often most valuable and leads to improvement; but there is another criticism which is unsound, unscientific, needless, and carping. Of course my criticism is not of this order! But the croakings about the Underground were most alarming. The tunnels would fall in; the houses near by would be shaken to pieces, persons would be

poisoned by the sulphurous smoke and smell! Well, none of these dreadful catastrophes occur. And up to the end of 1891 the company had carried the unthinkable number of nearly 1,558 millions of passengers without the loss of a life.

But it was not until the Great Western Railway offered £200,000 towards the undertaking, which would give them access to the City, and the City Corporation offered the same amount to assist in providing an outlet for the growing traffic of the streets, that the scheme began to make headway. Even then the price of the shares continued low, though they gradually rose as the time of opening drew near; but when it was opened and proved an immense success they rose rapidly.

The railway ran from Paddington to Farringdon Street. This part, therefore, of the iron circle now existing is the real old, original Underground; passengers to Paddington can at once see its value in affording them facilities for reaching the City. Of course there were several engineering difficulties in the way. The old river Fleet-now little better than a sewer and popularly known as Fleet Ditch-vigorously protested against the treatment to which it was subjected. Three times its meandering waters had to be crossed, until at last it was taken up very roughly out of its old course and dumped down into a sewer, something as we are told a vexatious, worrying child is put to bed. It fought for some recognition and gave as much trouble as it could, for it burst forth into irruption near King's Cross. But it had to submit to the inevitable and at last hide itself somewhere out of sight in a big drain-pipe.

And yet, less than seventy years ago, it was—according to pictures—quite a pretty little stream at St. Pancras, not far from King's Cross. If only our



"''NOTHER TRAIN PRESENTLY""



"STUDYING THE TUNNEL WALL OR BURIED IN HIS DAILY PAPER"

engineers, with all their skill and energy, were not quite so cast-iron in their ideas—if only they had a little more regard for the beautiful in nature and in art! Why did not some genius arise seventy years ago or less and cleanse Fleet Ditch, embank its sides, embower it in trees, bridge it where necessary, and provide an idyllic stream and pathway from Hampstead, where it rose, right through London to the Thames at Blackfriars?

However, the Fleet was disposed of and other difficulties were surmounted; such as the making of light but powerful engines which, like wise persons, should consume their own smoke and steam, and prevent their ill temper from becoming a poisonous nuisance as far as possible to anybody else; carriages had to be lighted by gas, and new signals invented by which trains could, like disasters, follow fast one after the other, but yet, unlike disasters, ever keep a safe space between.

But at length the line was opened. And because of its connection with the Great Western it had a broad, as well as a narrow, gauge of line. All doubts of its success were soon dissipated. On the first day—January 10, 1863—more than 30,000 persons travelled by its trains, and there was great difficulty in getting a seat—a difficulty which is not unknown to-day.

For some seven months the Great Western Railway managed the line—a piece of history which is probably now almost entirely forgotten; but differences arising, the Metropolitan Company began to work it themselves on August 10th, 1863. The double-gauge

rails also gave place eventually to the narrow gauge alone. Steel rails, to resist the frequent friction of so many trains running and of the numerous stoppages, came also to replace the original rails, which had steeled surfaces only. They are more costly, but less expensive in the end because they last longer.

The immense success of the Metropolitan led to a flood of proposals. Forthwith a committee sat. That is a way we have, and, notwithstanding some disadvantages and certain delays, it is not a bad way either. The Parliamentary Committees of 1863 and '64 effected quite a railway revolution in London. Their conclusions have really been the basis of subsequent schemes and of subsequent legislation. They laid down the eminently wise principle that no square or open space be taken; that a huge central station was objectionable; that underground railways were preferable to overground; and that no heavy goods traffic pass through the centre of London. Further, they decided to accept the inner-circle scheme of Sir John Fowler, the engineer of the Metropolitan-a

circle which would practically unite all the termini of the great railway lines—and they also approved the outer circle scheme.

These plans have both been carried out, with extensions and complications extraordinary.

The Midland and Great Northern have pushed their way into the City as well as the Great Western, and in order to do this a splendid piece of engineering work was performed. Their tunnel was brought under the Metropolitan tunnel—which itself is thirty feet below the roadway—and crossing under the line was carried up again to the other side of the Metropolitan. Thus, when a passenger is looking westward at Farringdon Street Station, he may see a Midland or Great Northern train on his left; when, after plunging through the darksome tunnel, he arrives at King's Cross, he finds the same train on his right. From this point, back again to Moorgate Street Station, where the Midland and Great Northern end, the railway is called by the railway officials the widened lines.

The trains rushing round one after the other—some on the inner circle alone, and others to various extensions or offshoots—are worked on a strict block and electric lock system, by which a space of line is maintained between each train; and by means of the machinery itself, the signalman is assisted to maintain the block, should he at any time forget what he has done. Notwithstanding, however, the very long time which the railway is necessarily worked—from about five in the morning to twelve or half-past at midnight—the

average hours of a signalman are about eight. In the same way throughout the line the men work in two batches.

Now look at one of the powerful little engines, painted a dark red, as it comes rushing into a station with its long line of carriages. The strong vacuum brake—for the Metropolitan have settled the "battle of the brakes" by adopting the "vacuum"—pulls up the train sharp and we can glance at the engine from the platform. Those two pipes from the cylinders to tanks on either side the huge barrel of the boiler, carry the steam after it has done its work, to a cold water bath in the tank, there to be condensed back again to water. And as the cold water be-

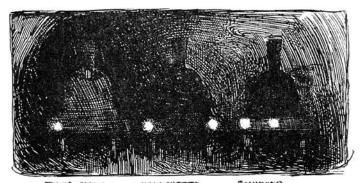
comes warm with the constant influx of the steam, it is ejected at certain intervals and fresh cold water taken in.

At some places the engineers may blow off the steam—engines being like some people who must get rid of their steam somehow—and each engineer is supplied with a diagram showing the parts of the tunnels where, by reason of blow-holes, or other openings to the upper air, the steam may be thus exhausted. The fact remains, however, that the greater part is condensed in the tanks, which are often refreshed with cold water for the purpose.

Then, that one white light on the engine's right hand means that it is an inner circle train, condemned for ever to whirl around the tunnels from Aldgate unto Aldgate; or if it bears two white lights, one on either side, it may escape the "vicious" circle and rush away to enjoy itself at beautiful Richmond, while if it have one white light on the buffer-beam, and one at the foot of the funnel, it has something to do with Hammersmith, and according to the side on which the



"THE TIRED BOY FAST ASLEEP IN A CORNER"



NNER CIRCLE MAMMERSMITA

ENGINE HEAD-LIGHTS (DISTRICT RAILWAY).

buffer-beam light appears, it depends whether the journey is through the City to Aldgate, or whether the train plunge under the Thames to come up bright and smiling at New Cross in the south-eastern district. On the District system these same dispositions of the head-lights have quite different significations, as our artist shows.

As for the St. John's Wood branch, its trains scornfully refuse to join in the mad whirl of the inner circle; its passengers must alight if they wish to mingle in that wild diversion; it heads away—largely through the open country—to Chesham and Aylesbury, by virtue of which the Metropolitan is becoming something more than a part of the Underground.

And what is its trunk line and terminus—or can it be said to have either? Well, so far as a circle can be said to have a terminus, Aldgate—where the bend round from Mark Lane comes in and completes the circle—appears to fulfil that function, though even then there are trains that run on to St. Mary's, Shadwell, and New Cross. In fact its limbs extend from New Cross in the south-east to Chesham in the north-west, and to Richmond in the west. But its trunk might be described as from Aldgate to South Kensington.

The Metropolitan has now an extent of 513 miles, with its lines to Chesham and Aylesbury, while its huge capital-expenditure has risen to £11,763,280, and it pays an average dividend of some three per cent. on its ordinary shares. The Metropolitan District is even more expensive, for its thirteen miles of line, with its extension to Putney, has a capital of £8,214,019. The building of the Underground has been a mighty undertaking, exhibiting much high-spirited enterprise and immense engineering skill and ingenuity, while the facilities afforded to London locomotion are simply enormous. In a comparatively few minutes the traveller can be whirled away from the western suburbs to the City or East End, or along the river to Hammersmith, Putney, or Richmond. So great has been the development of railway enterprise in London that there are now some 200 stations altogether in the metropolitan area, and even this large number is likely to be increased by the influx of electric railways. But it may be taken for granted that they will run underground, so intimately has that once-despised idea become woven into the life of the people of London.

TOILETTE TABLE DECORATION.

AFTER having arranged for the comfort of the parlour and the proper furnishing of the drawing-room, nothing adds more to the credit of a young housekeeper, in the matter of adjuncts, than a pretty bedroom. Of course we presume that she has already procured what is wanted for actual comfort. She may adorn her own room, or keep an ornamental spare room in which to usher her visitors. In houses where the rooms are rather small, it is better to have only necessaries in the chambers in use; the same axiom applies when sufficient servants are not kept. In both cases an ornamental spare room is the best management.

inviting appearance by all means, and the assumption of pretty knick-knacks in the lady's own chamber. It need not preclude the equal adornment of the spare bedroom. Having draped the toilette table with white muslin over a coloured slip, set a handsome glass upon it. Toilette glasses are frequently covered with muslin, festooned with bows of ribbon. If the frame of the glass is old or inferior, such an ornament performs a double duty. Placed on the table, surrounding the glass, a pretty toil-lette set will give the desired finish to the arrangements. A comb and brush tray is very desirable, but is not al-

ways to be secured. It is laid on the glass, on the flat | mahogany stand. A mat of crochet or some other fancy work should be placed between the stand and the tray, to prevent the polish of the mahogany from being disturbed. In arranging such a set as our cut illustrates, place the central vase before the glass; a candlestick at either side of the glass towards the back; a scent-bottle in advance of each, and much as they are placed in the illustration. On each side of the vase place the small stands, and at the front corners of the table a pair of The small stands are for violetpincushions alike. powder and pomade. A little ring or pin tray may be When there is no placed just before the large vase. central vase, a single large pincushion should occupy the post of honour—the centre of the table towards the front. The large vase should hold pot-pourri or dried rose-leaves and lavender moistened with eau-de-Cologne. Place wax candles in the candlesticks.

The present illustration (drawn from a set kindly lent by Mr. Rimmel) is of white opal china, edged with gold, and decorated with garlands of coloured flowers and leaves. Another beautiful set worthy of notice is of pale green opaque glass with a Greek border of gold and claret colour.

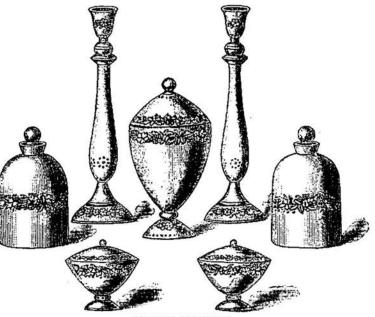
The entire success of such ornaments depends on the colour selected. The use of white, and white wax candles is always safe, although often less effective than colours. When a room is furnished with blue, choose blue ornaments, or white ornaments with blue. If the ornaments are white, let the candles be blue, and vice versa. When a bedroom is furnished with red or pink, let the ornaments l

be pale green, and the candles scarlet or white. If the room is furnished with green, and if the ornaments are pink, let the candles be pale green; or if the ornaments are white, or white with pink flowers, use scarlet candles. A bedroom is rarely decorated with yellow, but should it be so, let the toilette service be yellow, or white and gold or mauve. In either case use yellow candles, unless you can exactly match the mauve in colour with the candles. A pretty mat under each china article on the toilette table is an improvement. The mats should be all alike, and of the same colour as the candles. With white furniture any colour may be used, but not two colours, unless thus :- Bedroom furniture white, toilette ornaments blue, When rooms are large, and a little mats scarlet; or ornaments green, mats deep crimson; extra trouble in dusting can be afforded, we commend an or ornaments pink, mats deep green. White ornaments

suit any furniture. Then let the mats and candles correspond with the coloured decorations of the chamber. No wax candles are more effective than scarlet in a bedroom, whenever they can be introduced. And white ornaments with these are better than pink ornaments with green drapery. White ornaments and scarlet candles generally look well in juxtaposition with blue. and may often be used where there is pink or crimson furniture.

Ornamental bed and watch pockets, if intro-duced, must be of colours similar either to the furniture or the knick-knacks; and what-

ever is introduced for use or ornament should be governed by the same rule. The china washstand service must be of the colour of the hangings.



TOILETTE ORNAMENTS.



LIGHT GIVERS

BY MARY TITCOMB.

Low in the grate glows the soft-coal fire, while dismally, in the wintry twilight, the sleet rattles against the window panes. Shivering, not with cold, but with the shadow of outdoor discomfort

creeping, ghostlike, within, shall I bar out the intruder by heaping coals upon the grate and lighting every burner? A sudden thought, and drawing aside that convenient portière which shields from public view so many of one's belongings, after a little fumbling on the dark shelves, I pull out a small wicker basket; and seating myself on the soft fur hearth-rug, open it, disclosing a dozen or more dark pine knots. Selecting one, cautiously I drop it upon the glowing coals. An instant, then through a cloud of smoke there flashes up the brilliant flickering flame, the like of which so often illumined the kitchens and "fore rooms" of our grandfathers and great-grandfathers. Long and brightly it burns while I recall the gathering of those pine knots on the summit of the Shawangunk Mountains.

"They are splendid to brighten up a room on a cheerless winter evening," said a friend whom I met returning from her walk one August day.

She had noticed my curious glance at the woody knobs in her hands, for, though New England born and bred, I had never gathered pine knots.

"Where in the world did you find them? I have not seen any in my wanderings."

"Oh, not in the paths, in out-of-the-way places—in decayed wood," she replied. "I'll show you any time."

So we went, next day, pine-knot hunting.

My friend was keen in ferreting out the secret places where these curious objects were hidden. Down into deep dells she plunged where fallen pines lay in undisturbed repose, or climbed high rocky cliffs where decayed trunks were bleaching in the sun, it mattered little where, my following being somewhat less aggressive, but both of us vigorously attacking any promising old subject. Sometimes our weapons — only jack knives—proved altogether ineffectual, in spite of our digging and tugging, and of course we rejected all but the choicest specimens.

"And how do you carry them home?" I asked.

"Oh, in the bottom of my trunk. But if you have much fire don't put on too large a knot: you might set the chimney on fire. A friend at the South once sent me a barrel of pine knots, and I absolutely had to put them under lock and key, lest the servants should burn us up. But they were lovely to make a cheery blaze when the fire was low."

So I wrapped up my pine knots, and put them in my trunk, and here they are. Such curious shapes! This one, like the head and cocked hat of an old Puritan minister; this, a well-formed pig, minus one ear; this, to be sure, is a bird perched on a little branch, and here is a beautiful, smooth, polished knot—" only that and nothing more," but a perfect specimen.

One of the earliest illuminants of olden times was the pine knot. Perhaps some ingenious experimenter may have attempted to lighten his dark hut by the fitful scintillations of glow worms, or fire-flies, for it is said they sparkle with intenser brilliancy in captivity, and even awhile after death. It would be interesting to know, if such were the case, how the creatures were caught in quantities and in what they were held captive.

There are other creatures, denizens of the sea, which doubtless from time immemorial have afforded transient light in dark nights. In some latitudes the long, low, island coasts are illumined by fitful flashes of brilliant colors sent out



DIPPING TALLOW CANDLES.

by myriads of medusæ dwelling in the waters. The incoming tide of certain northern seas is luminous with hosts of these tiny creatures; while in tropical waters, also, long tracks of wandering light rise and fall with the changing waves. Sea lamps these medusæ have been called, hanging suspended, as they do, in mid-ocean, sparkling with phosphorescent fire which glows more brilliantly when a vessel plows her way through the waters. Even a passing breeze is followed by a quivering flash, and a shower of sparks scatters in every direction with each oar stroke of some little boat.

There are various plants, also, whose phosphor escence may have been known long before the young daughter of Linnæus made her curious discovery. She used to amuse herself in dark summer evenings by setting fire to the inflam-

mable atmosphere about the oil glands of certain plants, and while thus engaged accidentally dis-

> covered the phosphorescence of various flowers. Then there are certain mosses and fungi, creeping over the damp walls of caves and mines, which emit a weird but beautiful light that

> > may have been wonderfully cheering in long-ago times.

Not only animals and plants, but even stones, have a record among luminous things.

In 1602 one Vincenzo

Cascariola, of Bologna, a cobbler by trade, but indulging in alchemy for recreation, found in one of his rambles

a heavy stone of novel appearance. Always hoping to discover the wonderful chemical which should turn all his copper to gold, he put the

stone into his crucible and ground it up. He found no gold, but obtained the famous light-bearing "Bologna stone," since known as sulphate of barium, which "shone like the sun" in the dark.

But so far as practical utility goes, all these luminous objects flicker and fade away when compared with the simple pine knot, and its various modifications. Bits of resinous wood were burned in brasiers, anciently, and long sticks saturated with resin, or strips of wood dipped in fat and tied together, were used as torches. In old pictures we notice that torches were often carried inverted, and this must have been necessary until somebody happened to think that a simple device would catch the hot drippings before they reached the hand. A porous rush stuck into a vessel of oil was perhaps the first kind of lamp The graceful and beautiful Greek and Roman lamps could not have given much light. Refined oil was unknown, and the perfumes mixed with the oil to make the smoke less disagreeable really lessened the light. The elegant gold and silver candelabra used for holding oil in the palatial dwellings of ancient Greece and Rome must have contrasted strangely with the lurid, flickering, smoky flames they gave out. And our Saxon ancestors could not have found the curfew bell such a grievous requisition after A people who rose with the sun and spent their strength in day activities, if they had nothing but smoky lamps to scatter the darkness at night, what better could they do than go to bed?

Gradually, during the Middle Ages, candles made their appearance, somewhat in the present form; a great luxury at first, and used only by the wealthy. Exactly when wax tapers were first burned in churches is uncertain, but their enormous cost prevented any general use. A wax candle was a notable offering to a chapel or shrine; two were really a princely gift. When, after awhile, palaces began to be illuminated by them it was with a watchful eye against extravagance. Two wax candles in a private room were not an allowable luxury. It is said that Oliver Cromwell, once finding two burning on his wife's dressing table, instantly extinguished one, with the remark that candles cost too much

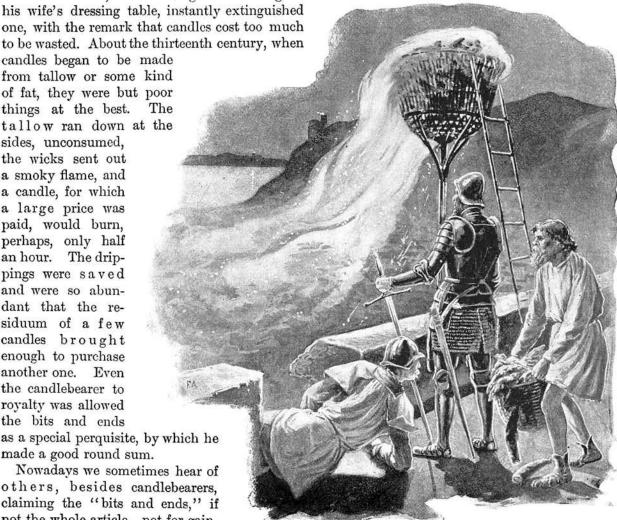
candles began to be made from tallow or some kind of fat, they were but poor things at the best. The tallow ran down at the

sides, unconsumed, the wicks sent out a smoky flame, and a candle, for which a large price was paid, would burn, perhaps, only half an hour. The drippings were saved and were so abundant that the residuum of a few candles brought enough to purchase another one. Even the candlebearer to royalty was allowed the bits and ends

as a special perquisite, by which he made a good round sum.

Nowadays we sometimes hear of others, besides candlebearers, claiming the "bits and ends," if not the whole article-not for gain, nor even, perhaps, economy but from an exasperated sense of being cheated. The traveler abroad, charged at hotels the highest rate for unused candles, has been known to take his revenge by carrying away those same candles, even though they were really an incumbrance to him. One jolly young fellow is recalled to mind, who, at a hotel in Cologne, arranged to have his room lighted by a lamp, which, of course, was "extra"; but, finding he was also charged for unused candles, he improvised a dozen candlesticks from boxes, bottles, etc., and lighting all his accumulated stock arranged them in a row on the table. The amazed look of the porter, who was summoned in the course of the evening, was, as the young man expressed it, "as good as a play."

Improvements in candles came slowly. Unrefined tallow continued to splutter; wicks were an annoying nuisance. Vegetable oils were tried and mixtures of various kinds, more or less satisfactory. Meanwhile, lamps, whose smoking



PINE-KNOT BEACON SIGNALS.

flames had been banished to the kitchen with the incoming of candles, took a sudden onward stride, when, in 1783, Argand invented his circular burner; and other improvements closely followed. About the same time chemistry began working upon candles. Tallow was refined; stearine evolved; tallow and wax mixed together. Experiments were tried with palm and cocoanut oil; spermaceti was found to be a beautiful substance for candles, and finally paraffine and mixtures of paraffine and stearine produced an article pleasant to burn and comparatively inexpensive.

The early settlers of New England had only inferior light-givers, except where unusual wealth admitted of the use of wax candles. And even in comparatively recent times, it was the practice of almost every housewife to have a supply of tallow candles made in her own house for ordinary usc.

"Can you recollect how your mother used to make her candles?" I asked of an old friend, whose early life was spent on a farm in Maine.

"Oh, yes," she replied, "I remember ever so many things that happened when I was a little tot five years old. Let me see—that was over sixty years ago. Mother was sick a good deal, and as I couldn't be with her much, I staid in the kitchen a good part of the time when not out of doors. Old Drusilla did the work, and I have seen her make candles many a time. In fact, I made them myself often, after I grew up; it wasn't hard work."

"Will you tell me just how they were made?"

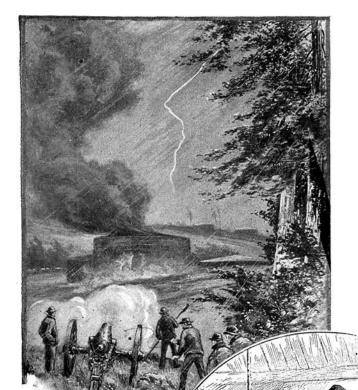
"Well, some tallow was put into a big iron kettle and hung over the fire on a crane. If there wasn't tallow enough to fill the kettle some water was put in, and the tallow rose to the top. Some tow or flax yarn was wound on a reel and then cut into proper lengths, so that you could take two or three of these and double Then a candle-rod, as it was called, was put through the loop, the yarn was pulled down even and twisted together. One candle-rod would hold several of these wicks. Two boards, resting on chairs, were placed parallel to each other, a little way apart, and the candle-rods, with the wicks on them, hung between them. Then we dipped the wicks on each rod into the tallow, one rod after another, holding them even, and hung them between the boards.

"Tallow cools quickly, so there were not as many drops as you might suppose. The dipping went on until the candles were of the right size. More water was added as the tallow grew less in the kettle, for unless the tallow was kept near the top you could not dip the candles straight, nor to their full length. A little beeswax was often added to prevent their running down. When hard enough the uneven ends were cut off and saved to melt over again. 'How many did we make?' I have heard my mother say she used to allow a candle a day for the year around. Of course in summer we often did not light a candle; but then in winter we used more than one a day. 'Candle-molds?' Oh, yes, we had some, made of tin, six molds together. But we did not consider candles run in molds so good as dipped ones—they were softer.''

In the villages of New England, half a century ago, candles must have been made yearly in many households; but my own faint recollections of the process are wholly connected with visits, as a small child, to my grandparents, who lived on a farm five miles distant. Memories come of the chaise ride in summer, of the old green sleigh in winter, I nestling among the buffalo robes at the bottom of it, while "Old Major," my father's trusty horse, pulled us steadily onward, without a suggestion from the whip, till we reached the two-story yellow house, with adjoining sheds and barns. Not at that time, but later in life, I learned that one of the barns was built in 1785, and the house in 1788, my grandfather having been the earliest settler in that section of country.

He had begun his explorations in 1776, cleared the land, tested the abundance of the crops, and built a log house—the first in the vicinity—before bringing his young wife there, in 1780.

The large, light middle room at grandfather's —dining and sitting room combined—rises before my mind; its painted floor, with here and there a home-made rug; the huge fireplace, with its blazing log and swinging crane, its curious crooked hooks and sundry pots and kettles. There was a back kitchen, but my remembrance of cooking is confined to this room. And such cooking! Even now fancy makes almost real the savory odor of the sparerib, sizzling before the fire in the big tin "baker," but soon to be put upon the table, which stood, covered with a home-made cloth, in the centre of the room; the mealy potatoes and yellow squash; the apple "pandowdy," baked in an iron kettle over the fire. Was anything ever quite so good as that "pandowdy"? Of course there were doughnuts, always at one corner of the table, on a large white plate with a blue border. We generally had that blue-edged crockery at grandfather's, except on such occasions as Thanksgiving, when a mixed



PETROLEUM TANK AFIRE.

light and dark blue ware was brought forth, specimens of which I treasure to the present time. At supper hot, puffy biscuits were produced from a smaller tin "baker"; and there were seed cakes and gingerbread and cider apple sauce.

As I sat at table, propped up to convenient height by a cushion in one of the quaint highbacked chairs, diligently stowing away the good things, I used to try to count the plates and platters and various dishes which, turned up on edge, stood on the shelves of the "dresser" in one corner of the room. The bright porringers fascinated my eye, the odd-shaped pitchers and mugs, the gay-colored bowls, and, not the least, the row of glittering brass candlesticks which adorned the broad lower shelf. These seemed to have been reserved for special occasions, for on the mantel were "japanned" candlesticks, which were used if our visit was prolonged to evening and the firelight grew dim, or a call for apples made a descent into the cellar necessary. In old

times the farmhouse fireplace, filled with blazing logs, gave sufficient light for the ordinary evening gossip, for knitting mittens and stockings, for corn-popping, beechnut shelling and similar occupations; but when the bright fire was kindled on the hearth in the "fore room," a couple of candles, erect in their bright brass holders. were lighted, more for show than for necessity. Appropriate accompaniments they were to the glittering round-topped andiron, the brass-headed shovel and tongs and the red leather bellows, by whose brass nozzle the sometimes reluctant fire was coaxed into a blaze. Spinning and weaving, quilting and sewing, were day duties; and as for reading, that was a serious matter, demanding full daylight in olden times.

These same brass candlesticks were quite handsome enough to be considered

ornaments, and a pair of those identical ones now adorn

a niche in my own room. Treasured with

> of old-fashioned snuffers of bright steel, with curiously wrought handles and three slender legs, standing on a quaint little tray. The sight of them brings back a picture of whitehaired grandfather, sitting in his armchair before the fire; and a dimmer vision of grandmother in the corner,

them also are a pair

with her freshly "quilled" lace cap—a dimmer remembrance, for she died when I was but a little child; gentle Aunt Nancy, who took me to see the new calf, or the little grunting pigs, or let me pick up the red apples in the orchard, following me anxiously all the while; good Aunt Lydia, who never forgot to fill a certain green bag with something good for me to take home. Ah, that old green bag! how many trips it took, with its string tightly clasped in my small hand, while a delightful curiosity occupied my mind as to the outcome! Would it be cookies, or heart-shaped ginger cakes, or turn-overs?yes, she sometimes sent turn-overs-or would it be popcorn, or butternuts, or, oh! perhaps, maple sugar?—or—and I would be suddenly

DRILLING IN THE DERRICK-HOUSE (PENNSYLVANIA OIL REGION).

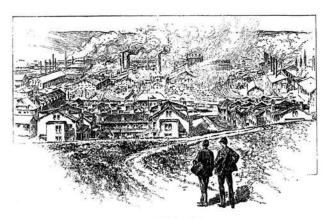


OIL WELLS, PENNSYLVANIA.

aroused from my dozing dream by the "Old Major" stopping. We were at home; and the contents of the green bag, whatever they were, would be quickly shared with my sister, who knew very well the good aunt never forgot the one who staid at home.

On a shelf in the chimney corner of my mother's kitchen stood a small red box, containing candles. They

were used in the kitchen, in a tin reflecting candlestick which hung against the wall, making the room quite brilliant. More vividly I recall our lamps, considered excellent at that time—two metal ones to carry about house, each with a queer little opening at the side for filling; three round-topped glass ones for common use; two, more elaborate, for special occasions, and one low glass lamp with a handle—my favorite. In later times we children sat around the table in the evening, studying our lessons, the one lamp in the centre being



HOMESTEAD, PA.

considered an ample light. "Sperm" oil was the approved kind in those days; and great care was taken in regard to the filling and trimming of the lamps. I remember a large, handsome lamp which later made its appearance in our household, having a peculiar double wick, a glass chimney and globe. It was expected to illuminate any large room brilliantly. That lamp was a terrible trial. It would

burn fairly well for an hour or so, then it would buzz and splutter and the light grow dim. Next day it would be carefully cleaned, trimmed and filled, only to enact the same performance in the evening. Finally it became the sole duty of that fine lamp to stand on the parlor table as an ornament—no further services were required from it.

What graphic tales were sometimes told at evening time of the hardships connected with the whale fishery, of the long, dismal arctic voyage, of anxious days and nights at the fishers' homes, watching for the return of husbands and fathers, until dread suspense ended in the desolating certainty of a whole fleet lost in far-away whaling grounds!

"Coal oil" came into notice with a flutter of excitement, kept in check by cautious people. And when "kerosene" flooded the market, charming everybody with its brilliant light, it was admitted into my father's house with most careful directions as to its use. Stories were told us of dreadful explosions from the oil getting too low in a lamp, or filling it while burning—carrying a needless caution in a household where "filling the lamps" was a regular duty every morning. But there were tales of explosions more mysterious. So metallic lamps were carried about house, and as a special safeguard the big five-gallon kerosene can was kept on the stone cellar bottom, whither the small can was always taken to be replenished.

What a joy the new light became as time changed the yellow kerosene into a clear, color-less fluid, lacking the disagreeable odor that pervaded our rooms at first; and improved lamps, wicks, chimneys, globes and pleasant shades gave proof that American inventors were doing themselves credit.

Many years before petroleum wells furnished the abundant supply of crude material from which kerosene is made, oil was distilled from bituminous shale—at first abroad, later in the United States. About 1853 it began to be manufactured in Massachusetts and New York, under the name "kerosene," that term being the special trade-mark, but soon generally adopted for any mineral illuminating oil.

Under a variety of names petroleum has been known from ancient times. Herodotus and Pliny allude to fountains of pitch which yielded oil. Baku, in recent times the centre of the Russian petroleum trade, was long ago famed for its sacred fires, which were doubtless fed from natural About the middle of the last century officers at certain military stations in North America noticed that the Seneca Indians, in some of their religious ceremonies, produced a brilliant flame by applying a torch to a thick scum floating on rivers and creeks; they also used medicinally an oil found on the surface of wa-In almost every part of the world petroleum has been found—sometimes in small pools exuding from the rocks; sometimes in large lakes, as in the island of Trinidad; sometimes as a "mineral wax," yellow and inflammable. And though long ago used as an illuminant, as a fuel, as a cement, and a lubricant, it is modern alchemy which has refined the oil and developed many marvelous substances.

The successful manufacture of oil from bituminous coal suggested the possibility of utilizing the native petroleum, and in 1854 the Pennsylvania Oil Company was organized, the locality selected for experiment being Oil Creek. More than twenty years before public attention had been called to the commercial value of petroleum by Professor B. Silliman, Sr., of Yale College; and now the younger Silliman was employed to analyze this

substance. His report, in 1855, was the foundation and inspiration of an enterprise which soon grew to huge proportions. But progress was slow and the supply of petroleum limited. At length E. L. Drake, superintendent of the company, determined to bore a well as had been done for salt, and began to drill early in the summer of 1858. After many delays and mishaps, on August 28th, 1859, he "struck oil" at the depth of sixty-nine and a half feet. The immediate yield, ten barrels a day, soon increased to forty; and the oil sold for fifty-five cents a gallon. The wildest excitement followed. Speculators and capitalists, merchants and builders thronged the locality; wells were sunk in every favorable spot; derricks, engines, barrels and tanks dotted the landscape; the soil was saturated by uncontrolled, overflowing wells. The odor of petroleum was everywhere, and everywhere petroleum was the topic of conversation. Towns sprung up like magic—and disappeared like magic, also; fortunes were made in a day, and often, in just as brief a time, lost; for as the yield of certain wells declined, or a tremendous flow gushed forth from new ones, the market price of petroleum went fluttering up and down in the most disastrous way. Early in 1861 petroleum was ten dollars a barrel; in the autumn it brought scarcely ten cents a barrel—a result of overflowing wells. Many business panics, causing widespread disaster, form a part of the strange history of this substance.

At length, however, it began to be realized that nature's reservoirs were not likely to be soon exhausted. The richest deposits of this country are chiefly in Northwestern Pennsylvania, the productive spots extending northeast into New York and southwest to Ohio, West Virginia, Kentucky and Tennessee. Petroleum has been found in most of the other States, and in Southern California the supply is sufficient for the Pacific coast. The Russian deposits are very rich and extensive, yielding an oil heavier than the American, and used extensively as fuel.

While scientific men differ, it is the generally accepted opinion that petroleum is the product of slow distillation of organic remains which were deposited in certain geological strata. These strata having been subjected to various changes, the organic deposits, decomposed by the earth's internal heat, evolved this substance, which lodged in the sand rocks, where it is chiefly found.

Nature has been lavish. Before the management of oil wells was thoroughly understood much oil ran to waste when a so-called "gusher" made

a sudden flow. Over-productiveness is not always a blessing in this country; but nothing in the American petroleum fields has equaled the famous Droojba fountain at Baku, which, in 1883, is said to have "ruined its owners and broken the heart of the engineer who bored it." The story is curious. The well, drilled to the depth of six hundred feet, suddenly burst one morning, knocked off the roof of the derrick, seventy feet high, and sent a stream of mingled oil and sand three hundred feet into the air. This, falling on the surrounding territory, soon made a series of oil lakes, some of which were said to be "large enough to row a boat in." About two million gallons gushed out from this well every day. Nothing could check the fury of the spouter. At length adjacent well owners resolved to plug up the irrepressible Droojba. Finally they appealed to government, and a skilled engineer was employed, who at length "capped" the monster and regulated its But for five months it had been deluging the country with oil at the rate of twenty-five thousand barrels a day, and the owners were ruined by the damages they were obliged to pay. In 1886 the Tagioff well began spouting about two million seven hundred thousand gallons daily, endangering the safety of Baku, three miles away. Government interfered and stopped the flow. The next year the Markoff well sent out a stream of oil four hundred feet high. On windy days the spray was carried to the distance of several miles. The Baku oil companies "lynched" the offender, at the owners' expense.

The depth to which oil wells are drilled of course varies greatly with the geological formation; but when the drilling has reached a proper point the well is torpedoed with nitroglycerine. This has the effect of sending out a torrent of the yellowish fluid. The flow is controlled by apparatus, and is carried into tanks, whence it is forced into the great pipe lines that ramify from oil centres to the huge refineries of our country, and through thousands of miles of piping petroleum is safely carried to its various destinations.

In these refineries many wonderful substances are evolved besides illuminating oil. Indeed, petroleum is a genuine Pandora's box, from which spring unexpected treasures. When the skillful refiner lifts the lid, out pop rhigolene, cymogene, gasoline, naphtha, benzine—heralds of kerosene and the heavier lubricating oils; and from the residuum, paraffine, with its modifications, petroline, cosmoline, vaseline, etc.. aniline dyes, perfumes, inks and other compounds of great value. The greenish-yellow oil which first

appeared in the market met no great success, because of its smoky flame, its disagreeable odor The perfected and its explosive tendencies. kerosene of to-day is the result of much chemical investigation, great skill and care in the refinery, as well as of legislation forbidding the sale of unsafe oil. It is now a matter fully understood by a skilled refiner at what point in the process the volatile benzine is so fully removed as to make the resulting kerosene safe. turns the lighter product into the kerosene tank he does so knowingly, carelessly or ignorantly; for there are numerous tests by which the safety point can be ascertained. When, in the process of distillation, the oil becomes too heavy for illuminating purposes it is turned into the paraffine tank, for the making of lubricating oils; while the kerosene is subjected to additional processes by which it is made clear and brilliant, ready for market.

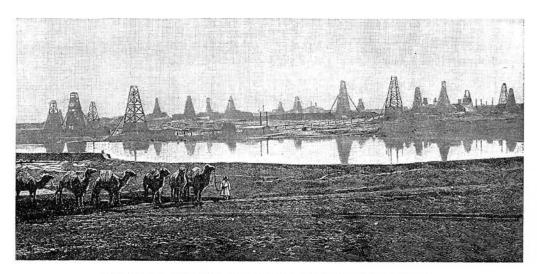
In 1860 an oil well in Ohio, bored to the depth of six hundred feet, suddenly sent forth an immense volume of gas with such violence that the heavy drilling tools were thrown out to a considerable height; and for five years the gas continued to flow, making a loud noise. Natural gas was no new discovery; and that it was inflammable was well known. But no "eternal fires" were needed in this country for religious ceremonies, as in Baku, of old; and when a gas well in Cumberland, Md., was accidentally set on fire every effort was made to quench it, but in vain. It burned for two years. As early as 1821 a gas spring was discovered at Fredonia. N. Y.; and in 1824 a hotel and a few public buildings were lighted by it. Later, the village was generally illuminated with this natural gas; and now a great industry has been developed in supplying many places, particularly Pittsburgh and its vicinity, with natural gas for illumination and also for fuel.

Early in the seventeenth century scientists noticed that certain substances burned in a close vessel produced a "vapor" that gave a bright flame. About 1688 Sir John Clayton accidentally discovered the inflammability of the "vapor" of coal, and amused his friends by burning some of it, which he had collected in bladders. In 1787 Lord Dundonald, of Culross Abbey, Scotland, generated a gas in the process of making coal tar, and with it—as a curious scientific display—illuminated the abbey. But practical gas-lighting appears to have been introduced by William Murdock, who, in 1792, lighted his house and office at Redruth, Cornwall, with coal gas. Later, many factories, both in England

and Scotland, were lighted with gas under his directions. In 1804 the Lyceum Theatre, London, exhibited the new method of illumination; several years later a few gaslights dissipated to some extent the darkness of Pall Mall and Westminster Bridge.

The novel light aroused much popular interest, but also great opposition. When at length it was about to be introduced into the House of Commons, so great was the ignorance concerning it that the architect ordered the pipes to be placed a few inches from the wall, so that the heat of the gas might not endanger the safety of the building; and members of Parliament were seen putting their hands on the pipes and wondering they were not hot. Public prejudice

By 1830 the new illuminant had grown sufficiently popular to authorize the forming of the Manhattan Gas Company, although numerous objections continued to be made to its use. But gas survived the attack of its enemies; its success was assured. The New York companies manufactured it chiefly from oil and resin up to 1847. Bituminous coal has been extensively used in making gas; and now both coal and water gas are supplied to our city-some companies making one, others both kinds. In recent years great improvements have been made in the quality of gas, as well as in the burners useda natural result of competition with the newer electric light. Better furnaces have been introduced into gas factories, larger retorts are used,



BALAKHANI, AND LAKE OF NAPHTHA-BAKU PETROLEUM FIELDS.

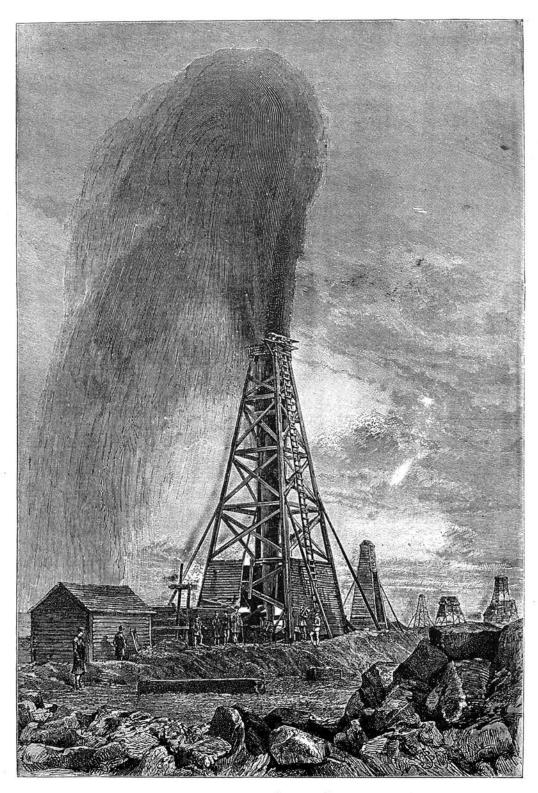
was conquered at length, and in 1822 four gas companies were formed in London.

The United States had no idea of being left in the dark. In 1806 David Melville, of Newport, R. I., lighted his own house with gas, and a street lamp in front of it. As early as 1816 attempts were made to introduce gas into Baltimore; but not until 1821 was its successful manufacture begun. In 1822 Boston accepted the new method of lighting with some degree of favor; and the following year the New York Gas Company was organized, but not until 1825 were the pipes laid—the initiatory steps of a radical change in street lighting. A hundred and twenty-five years before the darkness of New York highways was mitigated by candle lanterns suspended on poles from the windows of every seventh house. In 1762 public lamp-posts were erected for oil lamps, and this method continued until gas was introduced.

and higher temperature, whereby more gas is evolved from a given quantity of coal. Economical processes have been introduced into every step of the work, and improved methods of purifying produce an article of fine illuminating power.

In making water gas some hydrocarbon is mixed with the hydrogen to give it luminousness. This may be done by bringing superheated steam into contact with red-hot coal. The steam is decomposed into a mixture of hydrogen and carbonic oxide; and a stream of petroleum thrown upon the hot coal at this time, a light-giving gas is produced, which is subjected to the usual purifying processes.

Where buildings are not conveniently located to obtain coal or water gas from large mains, gasoline forms an excellent substitute. It is distilled from naphtha and then mixed with atmospheric air in proper proportions for burning. Being a



THE GREAT NOBEL "GUSHER," BAKU.

highly inflammable substance, gasoline must be favor, and which stands pre-eminent above all kept in a vault or underground, at a safe distance from the building lighted.

Gas illumination is doubtless susceptible of greater improvements, which may be developed in the face of its successful rival, electric light, which has so rapidly won its way into public

other artificial lights.

As long ago as 1808 Sir Humphrey Davy showed by means of a powerful galvanic battery that when an electric current was established between two bits of charcoal, and then interrupted by slightly separating the charcoal tips, an arch of dazzling light was produced. This discovery excited the greatest interest, but dreams of its practical utility were dissipated by the cost of electric energy as evolved by the galvanic battery. In 1821 Davy exhibited an electric light, which gave a hint of its coming splendor. It was a great stride forward when Faraday, in 1831, demonstrated that an electric current could be induced by the motion of a conductor before a magnet without galvanic action. Forthwith inventive genius devised various magneto-electric machines, and under the superintendence of Faraday electric light was introduced into two English lighthouses—at South Foreland, in 1858, and at Dungeness, in 1862. The apparatus, however, was very expensive; and the waiting world watched and wondered, while scientists tried new experiments, resulting in new discoveries; each hoping to devise the means by which electricity could be produced with so much ease and economy that electric lighting would be commercially advantageous. The use of electro as well as of permanent magnets, the cylindrical armature, the arrangement of a "magnetic field" in which the armature revolved, the so-called "self-exciting" machine, the laminated armature by which the amount of useless heat was lessened; these and other developments culminated in the dynamo-electric machine of to-day, by which mechanical energy—as of a steam engine, a waterfall or a similar motor - is transformed into electric energy at a comparatively small cost. Whatever the variation in structure all dynamos are made with this general object in view.

Long before cheaper electricity had become a certainty, electric lamps had been devised; but now inventive genius received a new impulse, which finally resulted in the present systems of illumination by are lamps and incandescent lamps. These two systems do not encroach upon each other, the arc light being admirably adapted to the illumination of streets, railroad stations, etc., but unsuited to give the softened indoor light for which the incandescent lamp is so well fitted.

The arc lamp consists chiefly of two carbon pencils, placed in a line with tips nearly in contact, and arrangements for keeping them in position. The carbon points are brought momentarily into contact when the current is established, and then separated, forming with the little intervening air space a voltaic arch, or arc, of dazzling light. Various automatic contrivances are adopted to keep the carbons, which are gradually consumed, at a uniform distance. Between 1867 and 1879 the arc lamp, arranged on the put into the glass flask, and the free ends of tube

Brush system, or some other system of similar kind, was introduced into many of our large

Half a century ago efforts were made to produce a lamp consisting of some stable material inclosed in glass, which could be rendered brilliantly luminous by electricity. Experiments with iridium and platinum, whose high melting point seemed to fit them for the purpose, showed that the incandescent point in these metals was dangerously near the fusing point. Attempts were then made to inclose carbon in an exhausted glass bulb. But no vacuum had ever been made perfect enough to render the carbon wholly incombustible. Eventually the mercurial air-pump made it possible to produce such a vacuum.

About 1879 several inventors brought out platinum lamps, but the radical objection to their use was soon apparent; and a year or two later, after many experiments, carbon lamps, possessing the essential features of the present incandescent lamp, were invented. Many modifications have since appeared, but the simplifications introduced by Edison have been of pre-eminent value in rendering the incandescent lamp convenient and economical for common use. Millions of these lamps are now made every year in various manufactories throughout our country.

The glass portion of the lamp is usually a pearshaped bulb or flask, open at the small end. A little tube is attached to the larger end, by manipulations familiar to glassblowers, opening into the interior, by which, later, the air may be The carbon filament is made of various materials-carbonized bamboo fibres, cotton thread, silk, hair, etc. Recently some artificial compound of carbon is used, whose exact nature is not generally known. The carbonized filament must be of uniform structure, and is bent into various shapes to give greater illuminating surface. The wires which conduct the current to the carbons were formerly made wholly of platinum; but an economy has been introduced by a partial use of copper wire, only that part being platinum which is to be actually imbedded in a glass tube through which the wire passes to reach the filament.

No satisfactory substitute has been found for this bit of platinum which expands and contracts at the same rate with glass. When this combined conductor is passed through the glass tube, the glass is fused all around the platinum, making an air-tight seal. Then the wires are solidly fastened to the carbon filaments, forming the inside of the lamp. This inside portion is then and flask, having been previously fitted for this purpose, are 'securely fused together. The air is next exhausted from the lamp, the little tube at the larger end being the medium of communication with the inside; after which the tube is sealed by fusing the glass, leaving only a little knob. Other processes follow to perfect the vacuum and test the filaments, before the lamp is attached to its base and considered finished and ready to be connected with the wires carrying the electric current.

The incandescent lamp is beautifully adapted to decorative effects, in producing which there seems to be no limit to ingenuity. Then there are small portable lamps, and lamps for use in delicate and difficult medical and surgical work; indeed, some of these tiny things are not more than a quarter of an inch long.

Incandescent lamps do not last forever, so manufacturers go on and on, sending out their yearly millions, not only to supply new localities, but to replace the old lamps whose vitality is impaired or lost. The probable length of a lamp's life can be pretty accurately calculated, but its lessening light is an indication that its power is waning.

Competition gives birth to improvements, and side by side the world's various light-givers have grown better and brighter. Candles and oil long vied with each other, with marked development of both; kerosene and gas fought a good fight, each holding fast a portion of the battlefield, for, where expense is the chief consideration, kerosene outrivals every household illuminart; gas and electricity keep up the contest, each serving the other; both incited to improvements by the mutual friction.

Although the electric light surpasses all others, experiments show there is room for great economic improvements in apparatus for converting electric energy into light. It seems quite within the range of possibilities that some discovery may soon be made whereby the energy now lost in useless heat can be utilized. In this marvelous age, who can set a limit to scientific progress or say "impossible" to the wildest scheme of inventive genius?



PURRINGS.

Oh, Bessie dear, to me be kind!

Don't drive me from the cushioned chair,
When by the fire poor puss you find
Prepared to spend the cold night there!

And Bessie, when I sing my song,
Hoping to make you understand,
Why do you cry "Scat puss! Go 'long!"
And to the cellar drive your friend?

Perhaps you do not understand;
But could I make my meaning clear,
And you'd my language at command,
These are the words would meet your ear:

"Imp-u-r-r-tinent p-u-r-r-son, why p-u-r-r-sist in p-u-r-r-suing this p-u-r-r-nicious p-u-r-r-pose? P-u-r-r-haps I can p-u-r-r-suade you to p-u-r-r-mit this p-u-r-r-secuted p-u-ss to p-u-r-r-severe in her p-u-r-r-pose of p-u-r-r-suing her nap in peace. P-u-r-r-ched here she can p-u-r-r-petrate no p-u-r-r-nicious p-u-r-r-loinings of any p-u-r-r-son's app-u-r-r-tenances.

This is the p-u-r-r-port of my p-u-r-r-petual p-u-r-r-ings. I hope you will p-u-r-r-ceive them to be p-u-r-r-tinent and p-u-r-r-suasive, and will p-u-r-r-form what I p-u-r-r-ceive to be p-u-r-r-fectly p-u-r-r-missible.

From your p-u-r-r-secuted p-u-r-r-titioner

Pussy.

-M. E. W.

A Cheering Outlook for the Editor.

DEAR friends and fellow-writers, send we our verse no more; The editor's strange blindness we long enough deplore.

Come, ye whose wounded spirits with disappointment burn, Strike! Let us strike! for even the goaded worms will turn.

Send not your verse in winter, his thoughts are full of care; The closing year and opening year bring all his mind can bear.

Send not your verse in springtime, lest, like the king of Spain, Your poem should go marching forth, and then march back again;

For while our hearts beat blithely with lambkins, buds, and birds, Above his pile of poems he mutters, "Words, words, words!"

Send not your verse in summer, he's gone north, east, or west; Vacation is as much for him as those who need the rest.

Or if within his office the seething hours are spent, He cares less for Apollo's flights than Mercury's ascent.

Send not your verse in autumn, he 'll greet it with a frown, Such hopeless heaps await him on his return to town.

Come join, ye fellow-writers, in answer to my call, In one vast vigintillion and send no verse at all;

And leave him, sadly jingling his overloaded purse, To meet December's issue with not a line of verse!

Charlotte W. Thurston.



LITTLE-KNOWN FRUITS AND VEGETABLES, AND THE METHODS OF COOKING THEM.

BY DORA DE BLAQUIÈRE.

PART I.

THE present influx of new fruits and vegetables into England is a very remarkable sign of the times, and evinces, in the most practical way, how the "ends of the earth" are being brought into communication with each other. The land and ocean highways are made safe and easy, and the means of transporting goods swift and cheap. It will be needful to add many new instructions to our old cookery books, for in some of them we find no mention even of "salsify," called very generally in America the "vegetable oyster," and of the agreeable varieties, now familiar to us, in chestnut cookery they are quite innocent. So when in the window of a Kensington greengrocer's shop we find "cardoons," "mangoes," "alligator pears," and "aubergines," we feel the want of some friendly guide to tell us the uses of these things.

The first article on my list is one that may really be termed a delicacy, in the roll of our table vegetables, but few be the cooks that know its merits, or how easy it is to master the secrets of its cookery. "Salsify" and "Scorzonera" should be mentioned together, for they are very nearly the same thing, the chief difference consisting in the colour, the first-named being white, and the last black. They are in season at the same time, from October to May, and the same methods of preparation will serve for both. Wash and lightly brush the roots, till quite clean, and then scrape them with a knife; cut into pieces of a finger's length; put them into plenty of boiling water with some salt and a little lemon-juice, or a spoonful of vinegar. If old, they will take nearly an hour's boiling before they are tender, and you must try them with a fork, which will easily go through them if they be perfectly done. Drain carefully and serve with white sauce. They may also be served like fritters, by dipping round pieces into a batter and then lightly frying them; or they may be cut into round pieces, and fried without the batter, when they will be found equally good.

In France, I have seen them served as a salad, and dressed only with vinegar and oil when cold. But, to my mind, they are never so good as when served after the manner of the real oyster, i.e., scolloped in a pie dish. For this they are boiled as above, and cut into small-sized rounds. Butter the dish and place the contents in layers, first the salsify, then a layer of bread crumbs and small bits of butter, and repeat the process till the dish is full, the last layer being of the bread-crumbs and the butter. Pour in at the side about a teacupful of water in which the roots were boiled: which will be found to have quitea strong flavour, and to be a very good foundation for any vegetable soup. Another method is to beat the roots, when boiled and tender, to a paste, season with salt and pepper, a lump of butter and a little milk; and if too thin, thicken with a little flour. Then to fry in flat round cakes, or fritters; dropping the paste into the hot fat in spoonfuls. These may be served on

A very simple Canadian recipe is as follows. Wash and scrape the roots thoroughly, throw them, when well washed, into a bowl of clean cold water. This is to avoid the possibility of their turning black, which they will do, if no precautions be taken. In England, salt, lemon juice, or vinegar, are all used for the same purpose. Cut them into pieces of about two inches long, and boil for three-quarters of an hour, pour off all the water; add a seasoning of pepper and salt, a lump of butter, and nearly cover with milk. Thicken with flour, and serve in a vegetable dish.

Those of my girl-readers who are students of botany will probably agree with me that "chestnuts," the next name on the printed list, are out of place; and that we should proceed with our culinary vegetables, which belong to the great order Compositæ, and which are allied closely in every characteristic one to another. Endive, dandelion, chicory (or succory), and the cardoon, as well as lettuce, all belong to it, and are all to be considered.

So we will proceed with them first. Endive is most generally used as a salad in England, and it is one of our most valued winter supplies. It is thought to be a native of China or Japan, and arrived in England as long ago as the year 1548, when Edward VI. was king. As a vegetable it is delicious when stewed, and to dress it thus you must begin by cutting off the root and the outer leaves, and washing it thoroughly well in several waters, so that all the insects and gravel may be got out. Then throw it into boiling water, and boil it rapidly for a quarter of an bour, drain it off, and press all the water carefully from it. Lastly, put it into a saucepan, and add one ounce of butter, salt and pepper, and a cupful of either new milk or cream. Stir it round quickly, and when thoroughly mixed, serve very hot, garnished with fried bread. In France, both endive, lettuce and sorrel, are rubbed through a coarse wire sieve, after having been boiled, and before being put into the saucepan, and, of course, this is the best way. But it would not be possible, in many houses, to take so much trouble, and by taking a little extra care in cutting them up finely, both before and after boiling, it can be avoided, but the dish will not be a smooth purée, as the stalks will remain in.

Now this recipe will answer for lettuces, watercresses, nettles, sorrel, spinach, greens, and any kind of kale. With reference to the green kinds, you must not forget to keep the saucepan uncovered, and the more water employed, and the faster they are boiled, the better they will be, and the greener they will look. As a rule, when they sink in the water, they are done, and they must be taken up immediately, or they will lose their colour. Now it is exactly here that English cookery is at fault, and it seems as if the watery messes our cooks send up, under the name of vegetables, were much complained of sixty years ago, so we do not seem to have progressed, in that way, at least. In no country in the world are better vegetables grown, or more pains

taken with them than in England; yet, alas, nowhere is so little knowledge exhibited of how they should be cooked.

The lettuce is one of the most ancient of our vegetables, and is said by some botanists not to exist in a wild state; from which we may gather that it belongs to some species so much changed by cultivation as to be no longer re-We first hear of it in history, in Herodotus, who says it was served at the table of Cambyses, the son of Cyrus, in its natural state, B.C. 550. Pliny mentions several kinds, as well known and used in Rome, and in the reign of our Henry VIII. the gardener at York Place, was rewarded for introducing lettuces and cherries into the garden at Hampton Court in 1530; while in 1597, the botanist Guard mentions eight kinds of lettuce as being cultivated in England. There are now more than thirty varieties cultivated near London for the market, including the "Cos lettuce," which hails from the island of that name.

The dandelion and the chicory plants are like each other in their uses; the young green leaves of both are used as salad, the older leaves are boiled as a vegetable; the water in both cases should be twice changed during the boiling, and the recipe followed as already given, and in the roots of both great virtue of

a medicinal character exists.

Taraxacum, which is a peculiar crystallizable principle, discovered by M. Dollox, and of great value in some liver complaints, was found in the dandelion, and the roasted roots form an excellent substitute for coffee. It is on record that during the last century in the island of Minorca, the locusts having destroyed the harvest, the people subsisted on this root en-

The dandelion was formerly planted in gardens, and the leaves blanched in the same manner as endive, in order to be used as salad, but the young leaves are easily procured in the spring, and form a delicious salad, just in the same way as the leaves of the endive and the Some people, however, do not like the slight bitterness, and it is to reduce this as much as possible that the water must be

changed during boiling.

The cardoon is a native of Candia, and it was introduced into England about 1650. It is now beginning to appear again at our tables, and is quite worthy of any attention paid to it. The whiter the cardoon heads the better, and the more delicate they are. Cut off all the stalks that are tough and fibrous, or hollow, and cut the others into pieces about six inches long; cleanse them well from the prickles, throw them into boiling water, and boil for ten minutes. Then throw them into cold water to take off the slime, which should come off easily by rubbing with the fingers. Lastly, put them on to stew with some rich gravy, and thicken it with a little butter and flour mixed together. They should stew for about half an hour till quite tender. They can also be served with white sauce.

I was about to go on to the subject of chestnuts, when it suddenly struck me that it would be better to deal with the aubergine, or "egg-plant," as they are now in season; and I am sure that all our girls have noticed their purple, egg-like forms in the greengrocer's shops. The "egg-plant" is a native, I believe, of the East Indies; but it is grown in great quantities in America; and much used and liked there, and in Canada likewise, as a vegetable. This fruit may be either of a violet hue, or white; and both are seen in our markets. They belong, like the potato and the tomato, to the family Solanaceæ, the nightshades, and to the same belongs the tobacco plant. It seems so strange to owe such a "staif of life" as the potato to such a poisonous class of plants. In addition to its French name, "aubergine," it has been called "mad apple," or "Jew's apple"; but in India it is best known by the natives under the name of "Brinjal," or "Binegun"; and there are, at least, four different varieties, and they form one of the best-known vegetables in the Indian They are dressed in various ways, and as vegetable-marrows are done-they must be peeled, boiled, and served on toast with drawn butter; or they may be curried, or cut in slices of about half an inch thick, after being peeled for frying. In this case, you must sprinkle a little salt on the slices and press down under a clean plate for an hour; then rinse the salt off in clean cold water; dry each slice in a clean towel; dip them in a well-beaten egg, and then in fine crumbs of bread; fry to a light brown, and season with pepper, either white or red. They are also roasted whole in their skins in the oven, with a little water in the pan, and served with a small piece of butter on each slice.

One of the best ways of cooking them is (I think) as follows:-Take a large-sized fruit and cut it in two, lengthwise. Take out the inside, leaving about half an inch of the peel. Chop the inside finely, and mix with an equal quantity of bread crumbs. Salt and pepper it, and add a little sugar; put the mixture into a hot frying-pan with a little butter, or good oil, and fry for ten minutes, stirring it carefully to keep it from burning. Then fill the shells with it, tie them together with a fine string, bake in the oven for half an hour, and serve very hot.

Another method is, to make fritters, by boiling the egg-plant till tender, cutting it in two pieces and taking out the pulp. Season with salt and pepper; dip in egg and bread crumbs, and fry in hot lard, using a tablespoon as the measure.

The subject of chestnut cookery is a very large one, and the tree itself, though a native of Asia Minor, seems to have been grown in Europe from time immemorial. There are many wonderful instances of its longevity, and of its great size, notably the great chestnut at Tartworth Park, in Gloucestershire, which was called the "great chestnut" in King Stephen's reign, and was already a large tree in King John's. But our own chestnuts are but small, and we are indebted to the south of Europe for the large specimens that are used for cookery. In their native lands they are used for bread, and take the place of wheat, in mountainous parts, where wheat cannot be grown; as in Auvergne and Limousin, in the

Apennines, and in Naples and Sicily. In France and Italy it is largely used in cookery, and it is very good as forcement-stuffing for a turkey, and for stews and hashes.

The following is a Jewish receipe for beef stewed with chestnuts: take a rather lean piece of beef of two or three pounds' weight, and put it in a stew-pan, with pepper, salt, a little nutmeg, and half a pint of water. Simmer it gently for two hours. Boil separately one pound of chestnuts for half an hour, take them out of the water, peel them whole; and half an hour before the meat be done put the chestnuts in with it to finish their cooking. Thicken the beef-gravy by putting into it a teaspoonful of flour, rubbed into the juice of half a lemon; and be very careful not to break the chestnuts when you put in the thickening. Dish the meat up first, and arrange the chestnuts round it, then pour the gravy round the

Chestnut soup is made very easily by boiling half a pound of them till the rinds and skin come off easily. About half an hour should be enough, and then mash them carefully with a "potato-masher" in a bowl, put them in a saucepan with a large stick of celery, and one small onion cut into pieces, and a pint of water; and boil for half an hour, till the onion and celery be soft. Then add half a pint of milk, and a little finely chopped parsley, and season with salt and pepper. Rub through rather a coarse sieve, and serve very hot .

A Dutch cook of ours used to make chestnut cream, or compôte, a most delicious supper dish, as follows:—Take off the outer rind and the inner skin of fifty chestnuts, and simmer gently in a quart of milk and water, till done like a flowery potato. Drain them, and bruise in a basin with a little powdered sugar and some vanilla flavouring, and rub through a coarse sieve. Put into the bottom of a glass dish, and cover with half a pint of firmly whipped cream, and strew over the top some "hundreds and thousands," as a finish. Chestnut pudding is very generally made with chestnut flour, or farina, which is a great saving of trouble. Any good recipe for a semolina, or tapioca pudding, made with eggs, will answer

I find the following recipe for a chestnut pudding iced, which is almost "too good to be true!" in an American cookery book, and it has very nearly its duplicate in an English one. So I daresay it really is of French ancestry after all. Boil half a pint of new milk with a quarter of a pound of loaf sugar and some thick vanilla; moisten a quarter of a pound of chestnuts boiled and pounded to flour with a gill of new milk, strain the boiled milk over, and put into a saucepan, and stir till quite smooth, then add the yolks of seven eggs, well beaten, and continue to stir for a few minutes. Take off the fire, and when nearly cold, add half a pint of thick cream. Beat-up for ten minutes, and put into a mould; and stand on ice for two hours till quite firm.

Chestnuts in France are served with coffeesauce, with thick meat-gravy, with celery sauce, and are often used as a pureé under pheasants or partridges.



BY DORA DE BLAQUIÈRE.

PART II.



NE of the most de-licious of berries is to be seen in large quantities during the autumn and winter in the green-grocers' shops. They seem to be but little known or used, judging from the difficulty

finding English recipes for cooking them. In fact, all those I have are of either American or Canadian origin; and in the United States "The American Cranberry-Growers' Association" exists for the purpose of cultivating this berry, which is so much esteemed in that country. The association also issues recipes for cooking it in various ways, which are distributed in leaflets, or small tractates, all over the country.

Form rly we drew our supplies of the cranberry from Sweden and Norway; but now we find the larger and brighter-hued American cranberry in our markets, and the small English cousin is conspicuous by its absence. The cranberry in botany forms an absence. The cranberry in botany forms an order of its own—the Vacciniaceæ, and comprises the bilberry, or blue berry (the huckleberry of America), and the great whortleberry, as well as the red whortleberry, or cowberry of the Scottish moors. In America it grows wild; and, as in northern Europe, it is probably indigenous, growing in marshy places and mountainous regions in the northern hemi-The cranberry contains both malic sphere. and citric acid, as well as an astringent substance, which exercises a tonic effect. The berries are used for tarts, jam and jelly; and are stewed as a compôte, to eat with rice, blancmange, and cream at luncheon and dinner. It is a cheap addition to our list of winter fruits, and is very good for children. The jelly is better than currant jelly for eating with venison or mutton.

The red whortleberry, or cowberry, also makes excellent jelly, and this has a certain medicinal value for colds and sore throats, but the Swedes eat it with roasted meat, and they think it is far superior to currant jelly for venison. The cranberry should not be eaten raw, but cooked, and it is a very valuable article of food, on account of its being so easily kept, for long sea voyages especially.

The first thing to be done with them is to wash them well in cold water, and pick out all the stalks and bad ones, so that the colour may be perfect of whatever we are going to make. The next thing is to remember that cranberries must be stewed in a porcelain-lined saucepan, quite clean and fresh, never in one of iron, tin, or copper. The sooner they are eaten after you have cooked them the better they are, and the more you will like them. They do not keep well after being cooked, though they keep so well before it. Brown sugar cannot be used for cooking them; it must be white, a good preserving sugar will answer. Equal parts of the latter and berries are used in cooking at all times, as it is an extremely tart fruit.

The first recipe I give is used for ordinary occasions, such as the children's dinner or tea. Take one pound of cranberries, one pound of sugar, and one pint of cold water. Boil for ten minutes. Do not stir, but well shake the saucepan to prevent burning.

With the next two recipes special attention should be given to the colour, which should be an exquisite crimson if well done. Take

one pound of berries, one pint of cold water, one pound of sugar; put the water and sugar into the saucepan and bring to a boil; then put in the cranberries, and boil for fifteen or wenty minutes till clear.

The next recipe is less sweet, and with the same amount of fruit and water has only half a pound of sugar with it. Boil the berries and the water together for ten or fifteen minutes, and add the sugar; and then boil for ten minutes more.

What is called "Strained Sauce" America is a superior thing, and is used for late dinners or "high teas," with blancmange. One pound and a half of berries, one pint of water, one pound (or three-quarters of a pound) of sugar. Boil together the berries and the water from ten to twelve minutes, and then strain through a colander. Return the juice to the fire and add the sugar; and boil for five minutes. Any of the above recipes are used to prepare the cranberries for tarts; but most people like the "strained sauce," the best (I believe) in America.

Cranberry jelly is made with one pound and a half of berries and one pint of water. Boil together for fifteen minutes, strain through a jelly-bag, and return the juice to the fire for fifteen minutes' further boiling; then measure the juice, and add as much sugar as you have juice, and boil again for fifteen minutes; and out into pots for use, as you would currantjelly. Very small sizes are the best to employ, as they are quickly used, and the jelly does not

become dry and hard.

Bananas grow under a far different sky to the cranberry, and form a botanical family of their own, under the name Musaceae. All of them are natives of the tropics, Cape of Good Hope, India, and Japan. It has been called, the "bread of the tropics," and Von Humboldt estimates "three good-sized bananas as containing as much nutriment as a 14 oz. loaf of bread;" and "they give the greatest amount of food from a given piece of ground with the least labour." Musa paradisiaca, the "tree of paradise," is the plantain. Musa sapientium, the "tree of the wise men," is the name of the banana, a variety of plantain; but the stems have spots on them, with darkpurple stripes, and the fruit is smaller, less curved, and more delicately flavoured than the plantain, the plantain being found in the East Indies, the banana chiefly in the West Indies. The name "tree or plantain of the wise men" was given to the banana because it was supposed that Theophrastus, the Greek naturalist, when he spoke of a fruit which served as food to "the wise men of India," meant the banana. The names, however, of plantain and banana seem to be somewhat interchangeable. The name of Musa paradisiaca, or "the tree of paradise," was given to the plantain, because many old writers supposed that our first parents clothed themselves with its leaves after the fall; and also that it was the real "forbidden fruit.

The fruit is never eaten green; but for the purposes of exportation it is cut before it has ripened, as the transmission of the ripe fruit takes too long to reach us in a marketable condition. The main part of our supply comes from Jamaica, where (a recent writer declares) the waste alone mounts up into hundreds of thousands of bunches each year; as the buyers for foreign markets rigorously exclude bunches that are undersized, or that contain a certain proportion of undeveloped "fingers," or too far ripened to stand shipping. These latter may be seen lying on the wharf after the vessel's departure, and may be had for the asking; but no one seems anxious to carry them away, as nearly all of the community are banana growers, and the supply of rejected fruit is far in advance of the needs of the population. It is said that a large fortune awaits the man who shall invent and perfect some drying or preserving process that could be depended upon, and which would succeed in putting into the banana-flour some of the sustaining and nourishing qualities that make

the banana a king of fruits.

The plants of all the Musaes attain perfection in about ten months, i.e., from their planting to the ripening of the first crop of fruit. When the stalks are cut down several suckers spring from the root, which in six or eight months will also produce fruit. A tree generally contains three or four clusters, each weighing twelve pounds and upwards. In Canada, where they are imported in very great numbers, a process of making an indelible ink from the skins is said to have been perfected; and there the great danger arising from the empty skins, when thrown down in the streets, is so fully recognised, that some clever person dubbed him a "Bananarchist—the man who drops skins on the sidewalk!" We suffer here from the same kind of careless cruelty to others, in the persons of those who throw orange-peel about our streets; and long ago in these columns I begged our girls to enrol themselves amongst the Orange-peel Brigade -as they might be called-that kindly but anonymous corps that saves our limbs and lives by picking up or kicking away the orange-peel from under our feet.

In America, I think the dish of fruit-salad of which I saw the most was that composed of oranges and bananas peeled and sliced, and laid in a glass dish, with sugar sprinkled over them. Occasionally a little ginger wine is added, but not often. I need not say that the seeds of the oranges should be taken carefully out, and as much of the white skin scraped off the outside as possible. oranges and four bananas were the usual proportion for a large dish. This salad is made some little time before it is wanted, so that the juice may run away from the oranges. Apple and orange salad is made from two juicy apples, and three oranges and plenty of sugar, the whole being moistened with some of the juice from a tin of pineapple. Melon salad is made with oil and vinegar, and pepper

and salt to taste.

Fried bananas are very delicious. They are peeled first, and then cut in two, lengthways, and are lightly fried in a small quantity of butter. They are sometimes served with a little sherry thrown over them, but are better without it. Banana tarts are very good also, the banana being cut into round slices and put into a custard, round which a lining of pastry is placed, just in the same way as if you were making a baked custard pudding in a pie dish. For banana pudding, the bananas are peeled and rubbed through a colander, mixed with milk and an egg and baked in a pie-dish like an ordinary milk pudding. Banana tart can also be made. The bananas are cut up as you would cut up apples, flavoured with a little lemon and sugar, and a small quantity of water added. A light puff paste is then put on the top, and the tart is baked in a quick

Pumpkins supply another rather novel addition to our monus. I have seen one offered for sale in a West End shop, to be cut in slices, as it would be sold in France, where the potaron is a favoured vegetable, and the soup manufactured from it a staple dish.

There are two methods of making pumpkin soup. The first is the French plan, in which the pumpkin is peeled, the seeds and inside taken out, and it is cut into small squares and put on to stew in a weak stock. When quite tender it is rubbed through a sieve, and just before the soup is served half a pint of cream, well warmed, is stirred in, pepper and salt to taste being added. The other method is to stew the pieces of pumpkin in water till it is nearly evaporated, and the pumpkin is quite tender. Then rub through a colander, and add new milk, till of the consistency of thick cream. Return to the fire to heat it, but do not boil it, add pepper and salt to taste, and serve very hot. I have also had pumpkin served as a vegetable dressed exactly as above, only instead of adding the milk, put in a little cream or butter, with pepper and salt, and serve as mashed turnips are served.

Pumpkin pies are one of the national dishes of America. The preparation of the pumpkin is exactly like that of soup. The gourd is cut in pieces, boiled in a very little water till tender, and rubbed through a colander; and then comes the deviation from the preparation of soup; to each small cupful of the pulp you add one egg well beaten up, a cup of milk, sugar to taste, and spice highly with ginger and nutneg. Beat all well together, line an ordinary dinner plate with paste, and put in about a breakfast-cupful, or enough to fill the dish, leaving a rim of paste to be seen. Serve

cold.

Tomatoes are the last vegetable on my list, and they may still be called "novelties, though they have been grown in England for nearly a hundred years. Now that the produce of other countries is brought to our door, they are to be found, not only in our greengrocers' shops, but sold in quantities on the barrows of the costermongers; and they appear to be eaten and enjoyed by the working population. They are eaten much in the same way as apples, and are economical, as requiring neither sauce, nor cookery; where health is concerned, they could certainly have no more desirable addition to their dietary; and I am always full of regret when I think how little our "working women" know of the best manner of cooking them, and of how much enjoyment they lose through their ignorance. So I mean to gather into the space that remains of this article all those recipes that are at once simple and inexpensive, with the earnest desire that they should attract my readers sufficiently to induce them to try them for themselves. I shall begin with tomato soup. Take eight good-sized tomatoes, or one tin of canned tomatoes, and one quart of boiling water. Stew for fifteen minutes, rub through a colander, and add a pinch of carbonate of soda, and stir well. Then return to the fire, and add one quart of new milk and a small lump of butter, with pepper and salt to taste. After the milk is added, the soup must not be allowed to boil, or it will curdle. If this soup be required thick, rub a piece of butter of the size of a small hen's egg into a tablespoonful of flour, and pour a little of the soup into it, rubbing it till smooth.

Tomato pie is one of the favourite dishes of the vegetarian, and is made with tomatoes skinned and sliced, and laid in a pie dish. Sprinkle with salt and pepper and add a little white sugar, a well-beaten egg, and half a cup of milk or single cream. The mixture to be added to the tomatoes when the pie-dish is full. Bake in a hot oven, covering the top with a rich paste.

Tomato sauce is one of the things few people know how to make. Take (for a small quantity for chops or cutlets) four tomatoes, either fresh or tinned, and cut them up, put them into a jar with either a dried capsicum or a few pepper-corns, and add a small cup of water. Cover the jar, and put it into a hot oven till quite soft. Then rub them through a sieve into a saucepan, and add salt and pepper if needed. Simmer slowly over the fire and serve very hot.

Fried tomatoes are very good. They should be cut in half, transversely, and rolled in flour, then taking one egg and beating it up thoroughly, adding some bread-crumbs and chopped parsley with some pepper and salt. Then roll the tomatoes in the mixture and fry to a light brown in either butter, clarified

dripping, or oil.

Scolloped tomatoes, done exactly as oysters are cooked, by cutting in slices and placing them in alternate lavers with bread-crumbs, epper and salt, and little bits of butter. The top layer should be of bread-crumbs, while a sprinkling of grated cheese adds an excellent finish to the top. Bake for twenty minutes or half-an-hour in a quick oven, and serve in the pie-dish in which they have been made. In South Carolina boiled rice is used instead of bread-crumbs, and the seasoning is salt, pepper, and curry powder, with a very little butter. In South Carolina, too, tomatoes are stuffed with rice in the following manner. Take a pint of boiled rice mixed with a quart of veal or beef broth, salt, and half a green pepper pod chopped finally. Cook these ingredients for fifteen minutes, and then add two tablespoonfuls of butter; then simmer a little longer, and when stiff enough take four large tomatoes, cut off a small slice at the tops, and empty them with a spoon of the seeds and pulp, and fill in with the rice stuff-ing you have made. When each is full, replace the slice at the top and put into a baking dish and cook in a quick oven for ten minutes, basting them during that time with either butter or oil, and serving, when baked to a light brown, on a hot dish.

Here in England, where our tomatoes do not ripen easily, it will perhaps be a useful addition to give one or two recipes for using up green tomatoes. The first is, green tomato sauce. Take one peck of green tomatoes, wash and slice them very thin, sprinkle with salt, and allow them to drain for twenty-four hours. In the morning press out all the water and lay the tomatoes in a preserving pan in layers with the following mixture:—Six or seven onions sliced, a quarter of a pound of mustard mixed with a quarter of a pound of mustard seed, a table-spoonful of cloves, two tablespoonfuls of black pepper, two tablespoonfuls of allspice, and one tablespoonful of ginger. Pour in enough vinegar to cover the contents of the saucepan, and boil very slowly till the tomatoes look clear.

An American recipe for a green tomato stew is as follows:—Cut off the ends of half a dozen green tomatoes, and then cut in thin slices and put them into a closely-covered saucepan without water, leaving them to stew for half an hour. Season with pepper and salt, mix an egg with half a cup of fine bread-crumbs and stir it in, adding a little piece of butter at the last. Green tomatoes are sometimes fried with onions and served as you would serve fried onions, alone. The tomatoes should be cut in slices, and the onions also.

Tomato preserve is very popular in America, and is made as follows:—Take the medium-sized tomatoes that are just ripe, scald them so as to loosen the skin, and take it off carefully. To each pound of tomatoes allow one pound of sugar, the juice and rind of half a lemon and a little piece of root ginger. Let them cook very slowly for three hours, and then put up in wide-mouthed bottles.

The following is a Canadian recipe for tomato catsup, and is said to keep admirably. Take half a bushel of ripe tomatoes, pour on boiling water till you can peel them, and put them on the fire to stew gently till you can strain them through a sieve, and skim them carefully while stewing. Then add to them a tablespoonful of ginger, two tablespoonfuls of ground cinnamon, one tablespoonful of cloves, half a teaspoonful of red pepper, a teaspoonful of mustard, three ounces of salt, a pint of vinegar, half a dozen of onions. Simmer gently from three and a half to four hours. The slowness of the boiling is essential to the goodness of the catsup. Put it away in corked bottles in a dry cool place. The knowledge of this recipe will prevent the great waste of tomatoes which is so much complained of by greengrocers and others who keep them for sale. And there is always an excellent market for tomato catsup.



BY DORA DE BLAQUIÈRE.

PART III.

"Sour-Krout" and "roth-krout," cold and hot "slaw," and sour and sweet pickles, form a considerable item in the diet of people who live on the other side of the world. All of them are of European origin, the first four in the North of Europe, and sweet pickles, I fancy, in Switzerland—at any rate, that is where I used to see them, and from thence their use has spread to Canada and the United States. Even of Even of this I am not quite sure, for the Swiss recipe I possess for plums done in aigre-doux f possess for pluins done in agre-unix fashion bears, to my mind, unmistakable marks of being a translation from English, and many of the recipes I have got in Switzerland show this. I am speaking of French Switzerland only, which has been a home and resort of English people since and long before the days when Oliver Cromwell ruled, and Charles II. required the regicides at the hands of the Syndic of Vevey.

SAUER-KRAUT

is a word of pure German. Translated, it means sour cabbage, i.e., that which has been allowed to ferment and become sour. An original American recipe is as follows:—Take the solid cabbage-heads, after one or two good frosts in the autumn. Slice as finely as possible, and pack, either in a clean barrel or an earthen jar, and sprinkle in salt as carefully as though it were gold-dust; one pint to a barrel is enough. Add vinegar, one gallon to a barrel, and then pack and pound down as hard as you can. Set it in a warm place, or at the back of the stove for about four weeks, until it has the peculiar kraut smell; then put the barrel into a cold place, and if it keep frozen-up for all the winter so much the better. Any firm sweet cabbage will answer for sauerkraut. When you want to cook it, you must squeeze about a quart from the brine, wash it in cold water, drain carefully, and place it in a porcelain saucepan, cover it with cold water, and let it boil for two hours; then pour it into a colander, press out all the water, and put the kraut back into the saucepan. Prepare a dressing of one tablespoonful of lard and one of flour, and stir this thoroughly in a frying-pan over the fire until of a light-brown colour; mix this well with the kraut and A few caraway-seeds are very often mixed with the kraut.

ROTH-KRAUT

is made in the same manner, but we in England more generally prefer what we call "red cabbage pickle." A Swedish way of dressing red cabbage is to slice it thinly, and add to it half a cup of vinegar, a tablespoonful of sugar, a teaspoonful each of whole cloves and whole pepper, and a little salt; place in a flat saucepan, cover closely, and cook slowly till tender. It is generally served with boiled or stewed The following is a very old and excellent recipe for making red cabbage pickle. Take a fine closely-grown cabbage; strip the outside leaves from it, cut it in thin slices, and put them in a large dish, strewing salt equally all over them. Cover with a clean cloth, and let them so remain for twenty hours; then drain the cabbage carefully, and put it into a jar with some allspice, whole pepper, and a little sliced ginger. Pour cold white wine vinegar over it, and cover the jar closely from the air.

COLD AND HOT "SLAW"

are forms of using cabbage that are not seen in England. I think "slaw" is a word which

is from the Dutch sla or slaa, contracted from salade, the old Dutch salaet, or salat, and it means sliced cabbage, served uncooked as a salad. The word "salad" comes from the Latin sal, salis, salt; so it means a sort of salted preparation of something. In my latest American cookery-book I find four recipes for "slaw":—"Cold, with celery, with cold dressing, and with hot dressing, and hot In all of them it must be remembered that the cabbage is uncooked, and a very hard and firm head is needful, which must be sliced very finely. Indeed, the last is one of the great characteristics requisite.

COLD "SLAW" WITH CELERY

consists of cabbage and celery mixed in equal proportions, very finely sliced, and dressed as a salad, with vinegar, pepper, and salt. Cold "slaw" with cold dressing is made with the finely shredded cabbage, and a dressing made of a teaspoonful of black pepper, and the same of mustard, and half a teaspoonful of salt, two tablespoonfuls of castor sugar, half a teacupful of vinegar, and the same of sour cream. Mix all together carefully, and pour over the sliced cabbage cold.

COLD "SLAW" WITH HOT DRESSING

is made with the sliced cabbage, and the dressing is made with a teacupful of vinegar, one teaspoonful of flour, one tablespoonful of butter, and two tablespoonfuls of castorsugar, and pepper and salt to taste. these ingredients on all together in a small saucepan, rubbing the flour into the butter, and boil for a moment, then pour over the cold sliced cabbage while hot, cover-up closely, and serve cold. Hot "slaw" is frequently seen in the Western States of Ame-Take half a pint of vinegar for it, butter the size of an egg, one egg, two teaspoonfuls of castor-sugar, and one each of mustard, salt, and pepper. Boil the vinegar and then add all the other ingredients quickly, and pour over the sliced cabbage. Cover up closely and serve in ten minutes, keeping very hot. Most of the American cookery-books divide

the pickle department into sweet pickles and sour ones; the latter recipes would be found in any English book, and do not materially differ from ours. Some of the resemblances are odd; for instance, in Francatelli's book, the recipe for "Ladies' Delight," is "Cold slaw with hot dressing," or what the Americans call "chopped pickles." In these the materials, such as cabbages apples or action. such as cabbages, apples, or onions, are un-cooked, while the hot and prepared pickle is poured over them, and then the mixture is eaten cold.

Every kind of fruit is sweet-pickled in America, from raspberries and peaches to crab apples. In Switzerland the plums treated in this manner are most delicious, and make even cold mutton agreeable. But as I am often told that the fancy for sweet pickles with meat is an acquired taste, and I had better mention it here, as well as the fact that some people do not acquire it, and prefer those pickles which are quite sour, probably these people would not like chutney, which is usually sweet, sour, and hot as well. The first process in making sour-sweet pickles is to steam the fruit till tender, and make the sweet pickle separately. Then, for pickled plums (the blue plum being generally selected) take eight pounds of plums, not overripe, four pounds of white sugar, one pint of vinegar, two ounces of stick-cinnamon, one ounce of cloves; put the vinegar, sugar, and spices on to boil in a

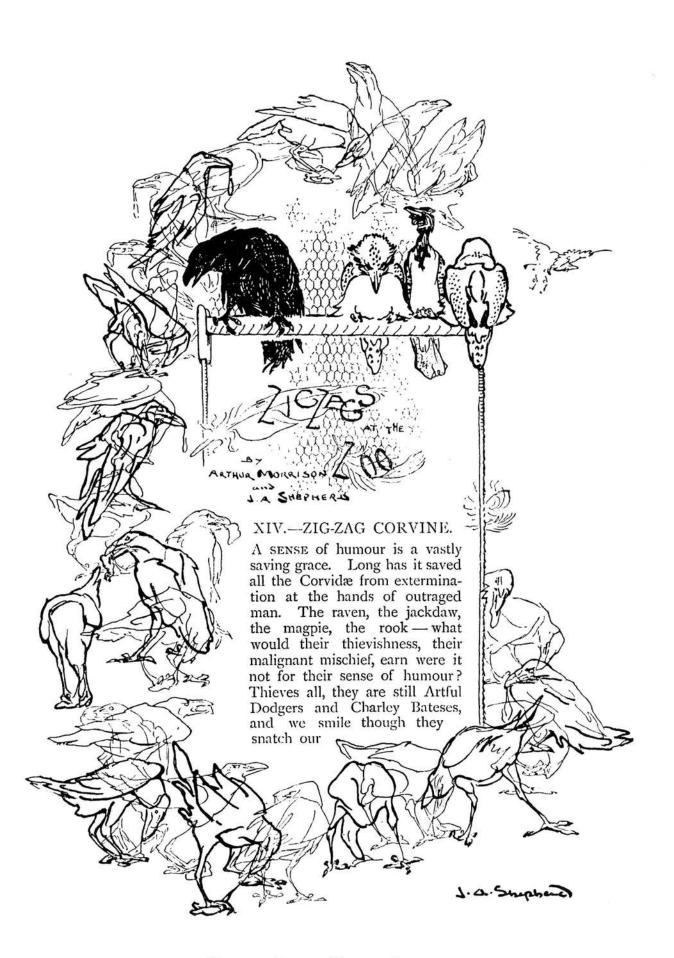
preserving pan, with enamel lining, and heat very gently, stirring the mixture to prevent its burning. Put the plums into a strainer, and when quite tender lift each plum gently into the hot syrup, and simmer all together for five minutes. Put into glass preserving-bottles and seal up while hot. Pickled apples are very good, and are preserved as follows. Take seven pounds of apples, peeled, halved, and carefully cored, and steam them till a straw can run through them. Boil together a pint and a half of vinegar, three pounds and a half of sugar, a stick of cinnamon, and a teaspoonful of cloves. When the apples are tender move over them carefully in the preserving-pan, and pour over them the boiling vinegar, sugar, and spices. Simmer very slowly during live minutes, then take out the apples carefully and place them in jars, pour the pickle on them

hot, and close up tightly.

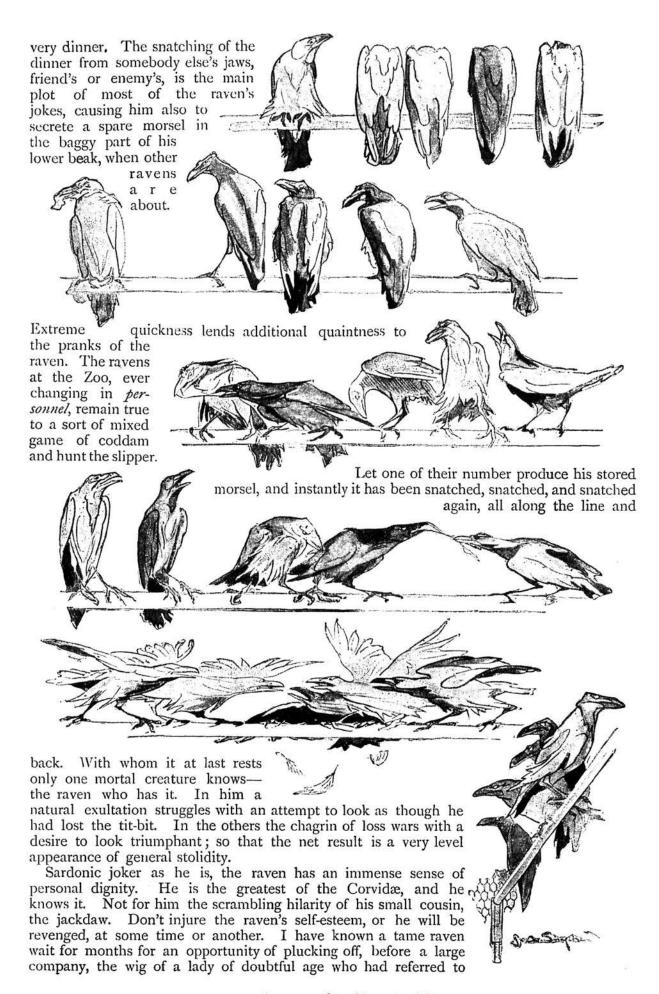
The following recipe for pickling either the ordinary blue plum or damsons is one I have tried and found good. In it the fruit is not boiled, and this forms the difference between German and American recipes. To my mind it is best not to steam nor cook the fruit when it is too ripe. Wipe and prick the damsons with a large needle and put them carefully into an earthenware jar. Then take a quart of good vinegar, three pounds of sugar, a large stick of cinnamon, and half a teaspoonful of cloves, and boil together in an enamelled saucepan for a quarter of an hour. Pour it over the fruit when boiling, and cover the jar with a saucer when hot. Every second day pour this off the plums and boil up again, pouring over the plums once more at boilingpoint. In my recipe it says you are to do this every second day for three weeks, and in that the pickle will be perfection. modern recipes, however, only give directions for once or twice boiling, and I do not myself think this is enough, but there may be a desirable medium adopted between three times a week for three weeks, which makes nine or ten times, and twice or three times, which is too little. In all cases be guided by the condition of the plums and their becoming tender or not.

SWEET CUCUMBER PICKLES

may be made in the same manner; the cucumbers being used when they are ripe, peeled and the seeds taken out, cut them lengthways, and then once across, and steam till quite tender, or else soak in salt and water for twenty-four hours, and drain and then soak in vinegar and water (half and half) for another twenty-four hours; drain and put into a jar. Boil one quart of vinegar, two pounds of sugar, a stick of cinnamon, and half a teaspoonful of cloves together, and pour it over when boiling, treating the cucumbers in every respect as you did the plums in the previous recipe. America melons and watermelons, crab-apples, grapes, tomatoes, pears, pineapples, quinces, peaches, raisins, strawberries, beetroot and rhubarb, are all sweet-pickled in the same manner, and they are usually so good that I almost think you might give your husband cold mutton, provided you could also supply some sweet pickles at the same repast. I need not tell you that they are intended mainly to eat with cold meat, but where you would serve red currant jelly—with hot venison, hare, or mutton—there you may safely serve your sweet pickles. To my mind they are in every way superior to the ordinary pickle, and I do not think you will differ from me when you try them.



Victorian Times • 64 • March 2025



him disrespectfully as "that thieving beast." Also, when an innocent little boy at the Zoo has asked his mother if the raven were a blackbird, I have observed a look of indignation that carried with it a distinct threat to bite that little boy's little red legs. Never will a raven forget his dignity. Even a raven in love won't do it.

He has, after all, considerable excuse A bird on such familiar for pride. terms with the great Odin as to sit on his shoulder every evening and retail to him the day's gossip is naturally proud. One Scandinavian legend mentions two such ravens, but I imagine that they are a sort of prophetic allegory, intended to typify successive editions of the evening paper. The belief in the raven as a bird of ill-omen probably arose from the fact that he was never known to turn up anywhere without stealing something, or doing mischief in some other

way; just as one may consider a nitro-



AM I A BLACKBIRD !

glycerine bomb an unlucky article to find on the cellar stairs. His fame as a prophet—and he was chief of the ancient augurs—may be due to many things. Perhaps he had a wrinkle or two from Elijah in recognition of the supply of provisions; or

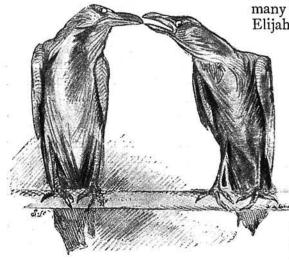
he may even have felt a motive for his generosity in a certain fellow-feeling; which would at least seem a plausible conjecture, since otherwise it is impossible to conceive of his refraining from stealing the supplies en route.

Travis is the keeper of the crows' cages, as also of the great Western Aviary. most surprising authority on birds, and is no fledgeling himself; he is the oldest keeper in

the service, as his "No. 1" testifies, and has been here since the year 1851. I have been lingering over the name "Travis" for some time, separating it thoughtfully into T. R. Avis, with an ultimate idea of a

pun, or an acrostic,

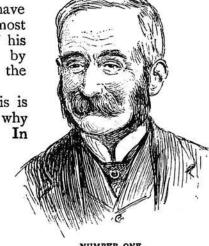
or a rebus, or a



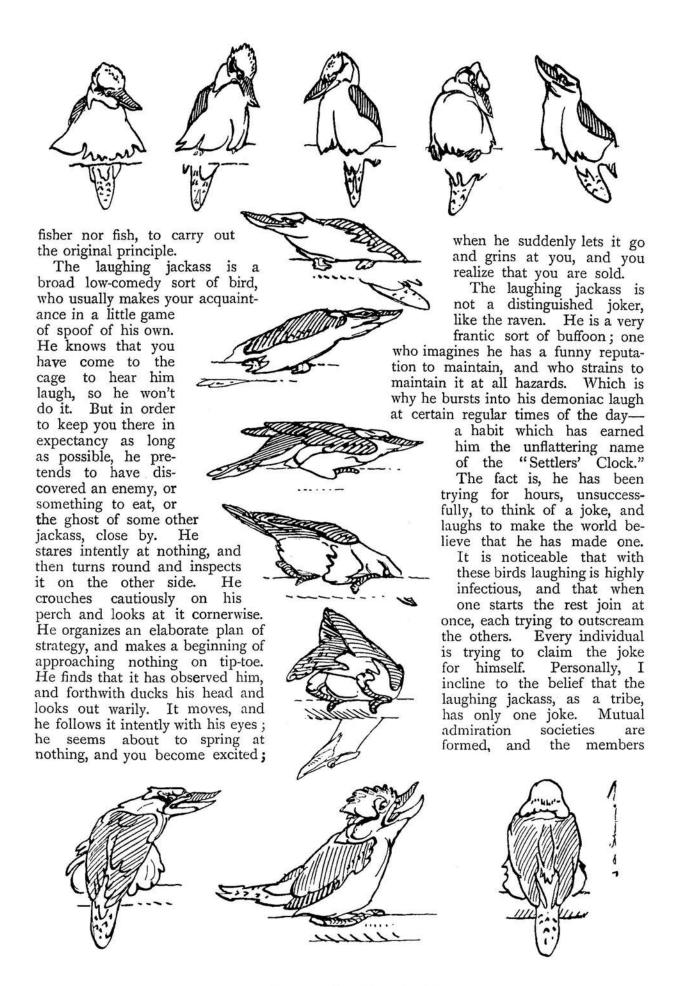
PERFUNCTORY COURTSHIP.

charade, or conundrum, or something of the kind, but have regretfully given up the notion. Still, considering his almost unique knowledge of birds-not to mention the ability of his brother as a bird-stuffer—I think Travis might arrange, by deed-poll, for some such name as Terrae Rara Avis, if the equal mutilation of name and catch-phrase be tolerated

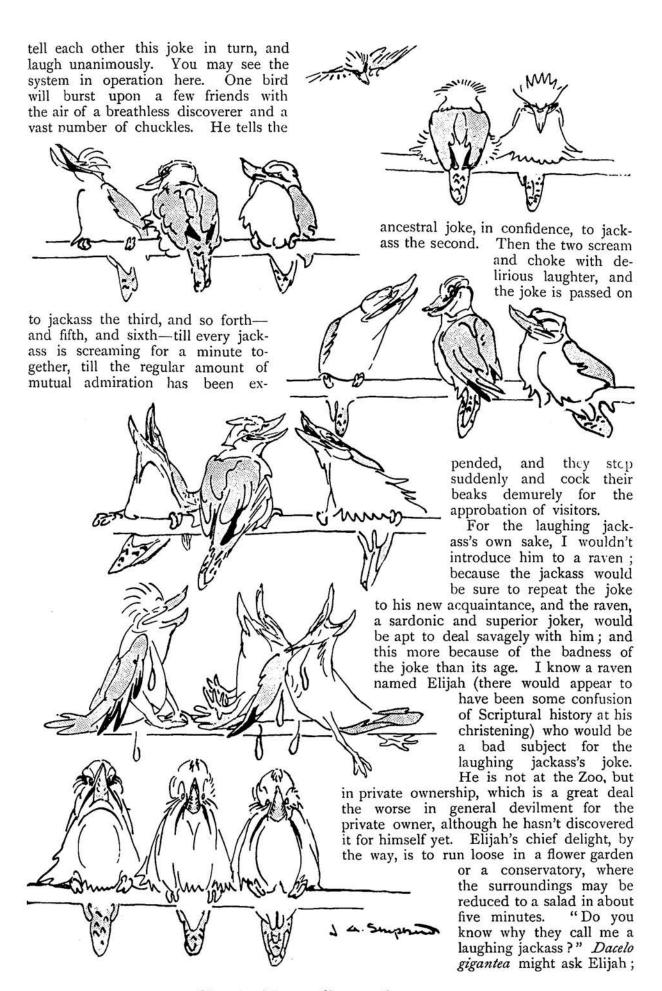
Among the many curious birds in the domain of Travis is the laughing jackass. Now, there are several reasons why something should be said here of the laughing jackass. the first place, this is a Zig-zag, and since it is headed "Zigzag Corvine," it is proper and in accordance with the correct spirit of Zig-zaggedness that something should be included that isn't corvine at all. Moreover, it is fitting that a bird which is called a jackass and is indeed a kingfisher, and being a kingfisher doesn't catch fish, should be classed with something that is neither jackass nor king-



NUMBER ONE.



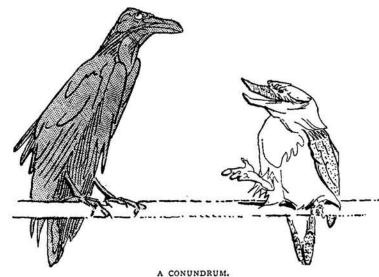
March 2025 • 67 • Victorian Times



Victorian Times • 68 • March 2025

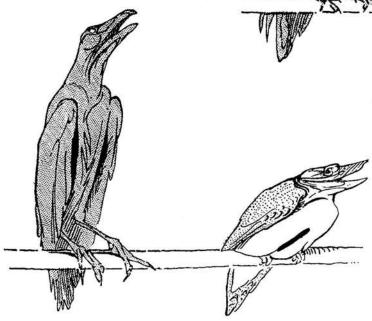
for this conundrum, I am convinced, is the ancestral wheeze. "Perhaps it's because you're a jackass to laugh so much," Elijah would say, severely. "No, you're wrong!" would scream

that fatuous kingfisher. "It's because they think Jack—as good as any other name! Ha! ha! How's that? Isn't Jackass good as his master?" and he would guffaw deliriously while Elijah sharpened his big beak. "H'm," Elijah would grunt, with savage calmness, when the laugh was over. "Just make another joke like that, will you?" And the unhappy jackass



would have to save himself as best he might.

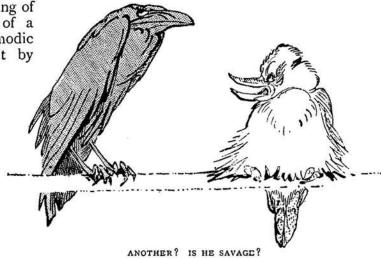
The laughing jackass is all very well as a chorus, but he can't sustain a separate low-comedy part. The raven can, the jackdaw and the magpie can, the jay can, and even the rook and the ordinary crow have their humoursome talents. The chaplain crow becomes a very passable Stiggins, under the influence of the sun, which acts as his pineapple rum. Hot sunshine opens the mouth of the



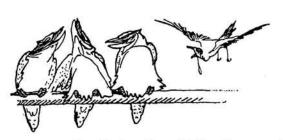
HA! HA!

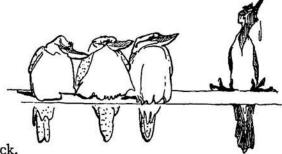
chaplain crow, and causes a rolling of the head and eyes, suggestive of a lachrymose sermon; and a spasmodic

croak that is an overcharged rant by itself. You grow more serious at each step nearer the chaplain crow on these occasions, and you pull up with a start at the thought of a collection. I am not sure that much of his distress is not caused by the laughing jackasses, who have an impious practice of laughing at their conundrum on Sunday. There is a temptation to call the three worst offenders among the jackasses Tom, and Bob, and Billy, and the chaplain

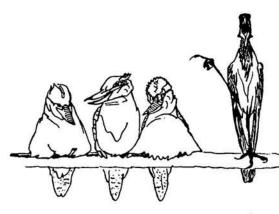


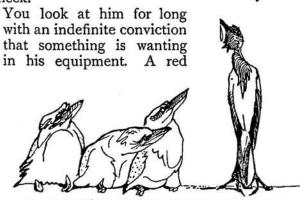
crow Sir Macklin, by compliment or with apologies to the "Bab Ballads"; but, in good truth, there is no other name for the chaplain crow but Stiggins. His white choker is



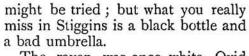


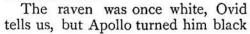
ragged and soiled and pulled askew on his neck.

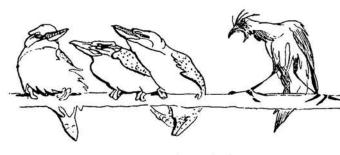




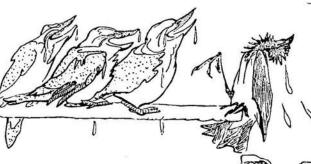
beak would be an improvement, certainly, and to secure it a cross with the chough





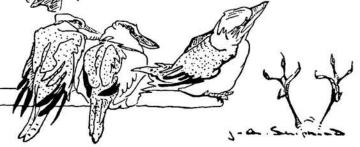


for tale-bearing. The rook and the crow must have told tales, too, unless Apollo condemned the lot at once, from un-



certainty as to the actual culprit. The magpie and the chaplain crow are only partly black — offence not specified. Perhaps they told white

lies. Here at the Zoo are two perfectly white jackdaws, and I have spent some time in an effort to discover for what conspicuously virtuous exploit they have been so distinguished. I can find nothing in their histories



WICKED TOM AND BOB AND BILLY.

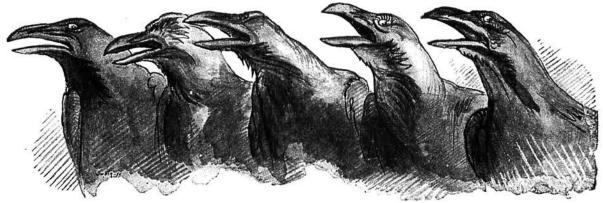
greatly to distinguish them from other jackdaws except the colour of their feathers. I have known many jackdaws and have possessed a few, but cannot, by any effort, imagine one of them doing anything particularly virtuous; jackdaws by nature are not intended to be pious. I have a jackdaw now who is a most interesting and pleasing thief, liar, and bully, but he neglects the more usual moral qualities. As a thief and a liar his performances are probably no more remarkable than those of other jackdaws, but as a bully he has ways of his own. He bullies every living thing with less brains than himself, irrespective of size, and eats such of them as are small enough. He hectors cats tremendously - merely by force of superior intellect. When a cat perceives a bird—the size of some she is in the habit of trying to catch—pelting headlong toward her down a garden-path, with furious eyes and beak, shouting "Hullo, Jack! Shut up! Shut up! Come along, old girl! Hi! hi! hi!"—that cat has some excuse for hastily retiring over the wall to think things over; and Jack cocks his head and chuckles. He bullies dogs when they will allow it; when he meets one that won't, he finds a safe perch and abuses him violently. He will even bully a housemaid who is afraid of having her heels pecked. Once he went on a visit and tried to bully Elijah, but that was very nearly being another tale. Elijah is not the sort of bird anyone would bully

Perchad.

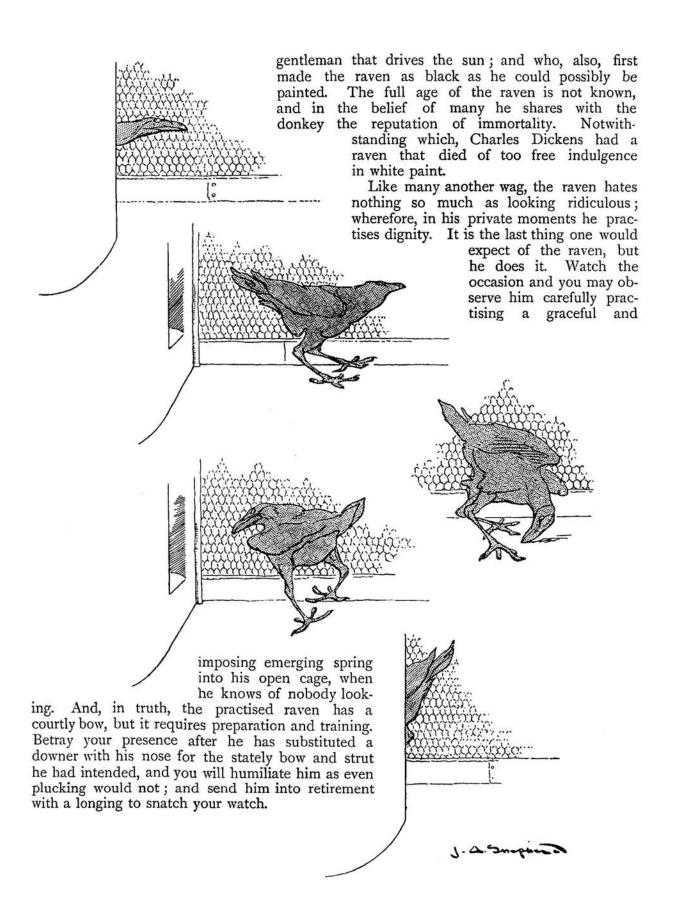
The raven was never meant to be bullied. He is a wag, certainly, but a wag of a satanic sort. His very chuckle is fierce; and when the heat makes him open his mouth to pant, it isn't with a lachrymation, as the chaplain crow, nor with a grin, as the magpie, but with a

for pastime, and Jack found speed as useful as intellect, for once in a way. But if he came to the Zoo to-morrow, he would probably begin by bullying Jung





A GASP OF BUSINESS-LIKE SERIOUSNESS.



THE ART OF COOKING APPLES.

WITH SOME RECIPES.



O many readers of GOOD HOUSEKEEPING, any set rules for the preparation of this common article of fruit may seem superfluous. The fact remains, however, that much unpalatable stuff under the guise of apple sauce, baked apples, etc., is frequently found on the tables of otherwise excellent cooks. No fruit grows that is more wholesome and appetizing when properly prepared, or so gen-

really misused as the apple. The following suggestions, if carried out, cannot fail to satisfy the most fastidious palate.

For apple sauce, wash and wipe the apples before paring, choosing such as incline to tartness. Pare with silver-plated knife, if possible, or clean an ordinary paring knife as often as the chemical action of the acid in the fruit corrodes the steel. Negligence in this particular invariably injures the flavor of the fruit. For several reasons the parings should be thin. First, on the ground of economy; second, because the most nutritious part of the apple lies next the skin; and lastly, from an artistic point of view, thin parings making the slices more shapely in appearance. Carefully cut out all imperfections and slice in quarters, or thinner if desired, into an earthern or porcelain vessel. Avoid the use of tin, since that manufactured at the present day is so largely adulterated with lead as to effect the taste of the fruit as well as injure the health. Pour boiling water over the apples, cover tightly and boil slowly. By adhering strictly to these two suggestions the fine aroma of the apple is preserved, and long, slow boiling induces a delicate reddish tint in place of the pale ashen hue so frequently noticeable. The slices can easily be kept whole by sweetening as soon as the fruit is ready for cooking, provided the apples are not too tart, otherwise sweeten fifteen minutes before removing from the stove.

By following these directions it is not necessary that the apples be of extra quality to insure delicious apple sauce, though it goes without saying that the more perfect and highly flavored the fruit, the more satisfactory the result. For the benefit of the readers of Good Housekeeping a few recipes, not usually found in cook books, are added.

Apple Snow.

l'repare eight medium-sized, tart apples in every particular as for apple sauce. After the sauce is quite cold-the colder the better-break the whites of two eggs in an earthern dish, turn the sauce over the whites, and whip the whole with a silver fork for thirty minutes. The whiteness of the snow depends on the care with which every blemish is removed when preparing the sauce. Nice and delicate for invalids, and a delicious dish for tea or dessert.

Apple Meringue.

Prepare, as for apple sauce, six or eight tart, juicy apples. Season and sweeten to taste. Line a good-sized plate with biscuit dough, thinly rolled out, and bake, then cover the crust with the apple. Now whip the whites of three eggs with three tablespoonfuls of pulverized sugar till it stands alone; spread the eggs smoothly over the top, return to the oven long enough to brown nicely.

For baking apples, choose those inclining to sweetness. Pare or not, as suits taste, but always core. Fill the opening with sugar, dust over a pinch of cinnamon, and place in an earthern pudding dish, with a little water. Bake till thoroughly done, and a light brown.

-B. Marie Müller.

A LARGE pie manufacturer in Chicago, calculates that Chicago eats forty thousand pies a day. As a person is said rarely to eat more than a quarter of a pie, there must be at least one hundred and sixty thousand people, or one-fourth of Chicago's population, who eat pie every day.

SOME SWEET POTATO DAINTIES.

SOUFFLE, CROQUETTES, PUDDINGS AND SAUCES.

Sweet Potato Souffle.

One pint of sweet potato pulp, three gills of cream or milk, sugar to taste, one wineglass of wine if liked, grated rind of one-half orange, one-half teaspoonful of vanilla sugar or extract, yolks of four eggs, whites of five eggs, piece of butter the size of a walnut. Boil enough sweet potatoes to yield one pint of pulp. Dry well and press through a sieve, add the butter, cream, sugar and flavoring. When cool stir in the well beaten yolks of the eggs, and then lightly whisk in the whites beaten to the stiffest possible froth. Pour into a buttered dish, cover the top with fine macaroon or sponge cake crumbs-if convenient. Bake in rather quick oven and serve at once with the following:

Creem Sauce.

Whites of two eggs, one cupful of powdered or fine granulated sugar, one wineglass of boiling cream or milk, one wineglass of sherry or other wine, the rind of one-half orange soaked in the wine and strained, the juice of one small orange or lemon. Heat whites to a froth, add the sugar by degrees. Just before serving stir in the hot cream, then the fruit-juice and wine.

Sweet Potato Cream Custard.

One pint of rich milk, or half milk and half cream, yolks of four eggs, one-half cupful of sugar or less, one cupful of potato pulp light and fine, the rind of one small orange cooked tender in very little water, and then pounded to a paste with one tablespoonful of brandy and two or three drops of rose water, one-half cup of almond paste, soft and creamy. Salt to taste.

Heat the milk, add the eggs well beaten, then mix with the potato pulp to which you have added the sugar, rind and almond paste. Butter a cabinet or Charlotte Russe mould pour in the custard, place the mould in a pan of warm water and bake until firm in the centre. When entirely cold turn out and serve with fresh or canned apricots, and whipped cream sweetened and flavored.

Sweet Potato Croquettes.

One pint of sweet potato pulp, boil and evaporate the water quickly so that the potatoes may be mealy, mash while warm in warm bowl or press through a colander into warm bowl, add onehalf cupful of cream, a bit of butter the size of an English walnut. a little salt, one-quarter cupful of sugar, one-half teaspoonful of vanilla sugar or extract, orange rind enough to flavor and the yolks of one or two eggs, mix with a fork. Take portions of the mixture and roll into little balls or corks, or make them pear shaped. Handle lightly and quickly. Dip them into egg slightly sweetened, and then into crumbs. A mixture of sponge cake. maccaroon and finely chopped nuts, (almonds) may be used or simply fine cracker crumbs. Place in a wire basket and fry a golden brown in smoking fat. Drain on paper sprinkled with powdered sugar and serve with cream sauce or wine or bramly sauce, if liked a bit of orange marmalade or apricot preserve may be pressed into the center of each croquette when moulding.

Sweet Potato Pudding, No. 1.

One pint pulp of parboiled sweet potatoes pressed through a sieve, one-quarter cupful of butter, three-quarters of a cupful of sugar, one cupful of cream, one-half teaspoonful of vanilla, four eggs yolks and whites beaten separately, one glass of brandy or sherry wine, one-half pint of cocoanut, one cupful of almond paste. Cream the butter and sugar, add the yolks of the eggs well beaten, mix with the potato pulp by degrees, and beat until light, add the cream, cocoanut, brandy and flavoring, and then the whites of the eggs beaten to a stiff froth. Place in buttered dish and bake in moderate oven until firm in the centre. When nearly done cover with the almond paste, which has been softened to a creamy paste with milk or cream, a very little rose water, the white of one or two eggs beaten to a stiff froth with one or two heaping tablespoonfuls of sugar. Serve warm with cream sauce or cold with sweetened and flavored cream or whipped cream.

-Mrs. Nellie M. Littlehale.



Victorian Voices.net Has Art for Every Occasion!

Over 63,000 images • Packages from \$5.99-\$9.99





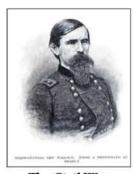




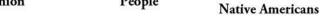






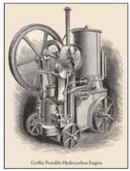


Birds



Eminient Victorians

The Civil War







World Architecture & Landscapes





Ships, Boats, Seascapes & Sailors

Decorative Initials

Line Art, Ephemera & Full-Color Prints • High Resolution • No Ridiculous Restrictions victorianvoices.net/clipart