Victorian Times

A Monthly Exploration of Victorian Life

Vol. B-3, No. 1 - January 2026

London Cabs & Cabbies • *Can Animals Count?* • *Zoo Stories* • *Historic Coins*
Smuggling in Paris • *Riding the Derbyshire Express* • *A Look at Old London*
Owney, the Post Office Dog • *Victorian Recycling* • *The Etiquette of Hospitality*
A Soap-Bubble Party • *Devonshire Recipes* • *Hungarian Embroidery*

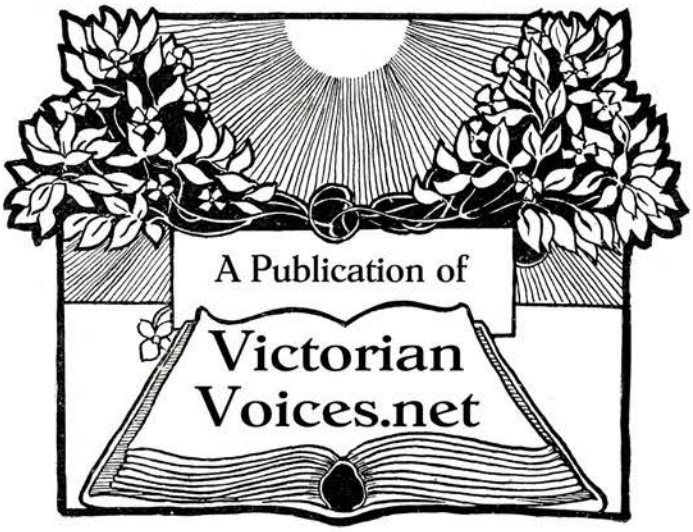
Victorian Times

A Monthly Exploration of Victorian Life

Vol. B~3, No. 1

January 2026

edited by Moira Allen



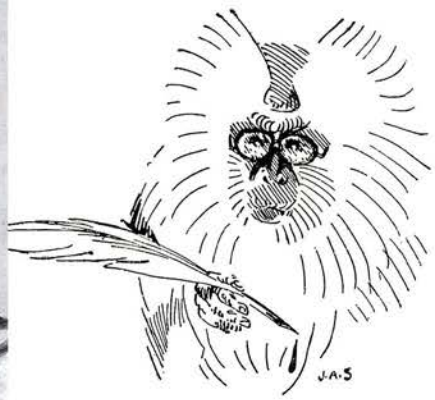
Print Edition Independently Published
Print Edition ISBN 9798279241965

Cover Image: Print from a Victorian scrap album, undated.

www.victorianvoices.net • editors@victorianvoices.net

Victorian Times

Vol. B-3, No. 1
January 2026



The Great Re-Users

If I asked what comes to mind when you think of the Victorian era, probably few people would remark that it was the golden age of recycling! And yet… it was. We like to think that "recycling" is a modern concept, the product of our more enlightened age. But we are amateurs compared to the Victorians.

As an example, "A Home for Stray Bottles" (page 37) looks at how Victorians reclaimed millions of glass bottles and restored them to their owners (typically the manufacturer of whatever product the bottle contained). We've probably seen people scavenging through trash bins to find aluminum cans to turn in for the deposit; such a sight would have been familiar to Victorians as well, as many of those bottles were reclaimed from dustbins and rubbish heaps. In fact, the Victorians were the founders of our "bottle deposit" laws, and I suspect many of my readers (like me) can recall taking pop bottles back to the store for the deposit.

Victorians didn't stop at bottles, however. Recycling, reusing and repurposing was applied to nearly every type of rubbish you can imagine (or, at least, that existed in the 1800s). There was no such thing as worthless garbage. Bones, for example, could be used in the manufacture of china, made into useful items such as toothpicks, or ground into fertilizer. (Lots of Victorian waste ended up as fertilizer.) The coal dust and cinders from the household hearths were still usable as fuel. Paper might be recycled into *more* paper, or as papier-mache, or, if it was too damaged, it also might end up as fertilizer. There were a myriad of uses for scrap metals, and items like broken paving stones or shards of crockery might end up as a base for a road-bed.

Fabric had a nearly endless life-cycle. First, the economical Victorian lady rarely tossed away an old, stained, or torn garment. Thrifty women might "turn" a garment several times before it could be "turned" no more; this meant taking out the seams, reversing the fabric so that the outside became the inside, and sewing it up again. Garments were remade with different trimmings to look "new" again. A garment too damaged to be worn might still be cut down to make clothes for children. Once it had passed that point, however, it still had uses. It might go into the rag bag—or it might be sold to the used clothing dealers, who could "revive" nearly anything one last time, often to be sold in the used clothing market of Petticoat Lane. Linen rags might be sold to paper mills, while wool was recycled into "shoddy"—a process that combined new and recycled wool into a material that gave its very name to stuff of poor quality.

Servants often felt it was their "perquisite" to be able to sell off household "waste," including used tea leaves, candle ends, grease, bones, food scraps, rags and more. Many household guides advised against allowing such practices, pointing out that this simply encouraged servants to create "waste" that they could sell. The mistress of the house was advised, if she wished to allow such items to be sold, to sell them herself.

Many Victorians sought to achieve a zero-waste household—and many succeeded. But Victorians had several advantages over their 21st-century descendants. One advantage, quite simply, was that there was no task too dirty (such as sorting mounds of garbage for marketable discards) to be disdained by the poorest of the poor. Sorting garbage was still preferable to the workhouse.

The other advantage? No plastic. Victorian waste could be reused and recycled because it consisted primarily of *natural* products—tallow, grease, fat, bones, ashes, food scraps, paper, fabrics, metal, glass. Nearly all of these could be re-used, ploughed into the fields, or, at worst, destroyed with no lasting harm to the environment. One wonders how Victorians would have dealt with the modern miracle of plastic packaging—but given their resourcefulness, I suspect they might have found a solution even to this.

—Moira Allen, Editor
editors@victorianvoices.net

THE EXACT FARE.

CABS AND THEIR DRIVERS.

By W. OUTRAM TRISTRAM.

Illustrated by HUGH THOMSON.

THE best way to study cabs is to drive about in them. But do not always select the same starting point for your venture, for the cabs of London are as varied as its flowers—and when an early train has to be caught, as difficult to find. The early bird does not catch the cab. He as a rule loses the train. One soon learns that a cab hired in Bond Street does not recall a cab hired in Westbourne Park, while the hansom of Camberwell would appear to trace back a painful descent to the hansom's first inception.

Perhaps the pavement is the best place to study drivers from, and the best time the great moment of remuneration. It is when "How much?" is the question that delicate traits reveal themselves—especially when you have been driving about all day in the cab (forgetting to tell the driver that he is hired by the hour) and at the close of a summer evening tender an exact legal fare.

The top of an omnibus too is not a bad place from which to view the realities of

cab life. A collision for instance between a 'bus and a hansom is best seen from the 'bus, unless the 'bus chance to be a pirate, when probably both fore wheels will come off. These preliminaries adjusted, mark the spontaneous flow of talk. In the heated argument between the contending charioteers both show themselves Ruperts of Debate; but generally the hansom cab-driver retains the advantage. He lives in a rarer air; and though the cab-stand—that House of Commons which knows of no Recess—keeps his power of *repartee* active in a constant practice with fellow professionals, he has not like the 'bus-driver to divert it on passengers unworthy of his steel. Meanwhile between 'bus-driver and cabman wordy war rages. There is great taking of numbers, and counting of tribes, and dark references to wives now joyous presently to be made widows. The strife waxes between the heroes, till suddenly a solemn tread sounds, and Jove interposes. In plain words, policeman

REPARTEE.

X arrives. And the cab-driver, his number given, having, uncouth swain, sung sufficiently to oaks and rills, seeks fresh woods and pastures new, which generally take the form of the nearest cab-stand situate over against the nearest place of public entertainment.

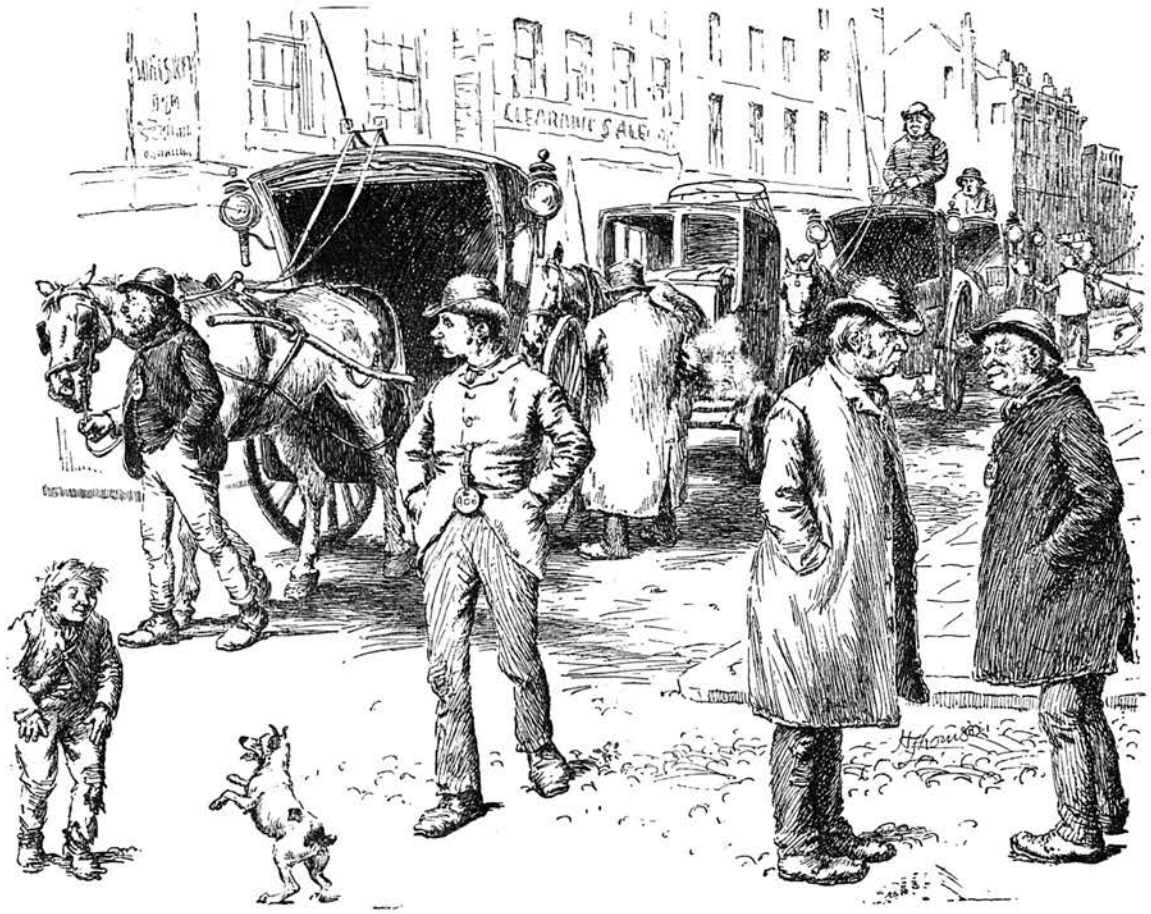
At the cab-stand a fresh view of cabs and their drivers is to be obtained. Now lies before the observing historian's eye an idyllic interlude of this restless life upon wheels.

"Hush! now everything is still,"

except the slow grating of a cab being moved higher up to take the place of a fresh departure, the monotonous champings of hungry horses' jaws buried in nose-bags, the slow undeviating tread of worshippers' feet to the swinging doors of the Temple of Bacchus and bread and cheese. The driver of a four-wheeler adjusts the horse cloth, having just been roused out of a deep sleep. Behind him on the rank a hansom cab-driver stands up in his perch for the two-fold purpose of stretching himself and taking a wider view of a stagnant world. Two cronies at the corner

discuss the merits of the last Derby winner, the claims of Mild and Burton over other admixtures, the result of the last prize fight at the latest licensed place of entertainment for the nobility, and the difficulties thrown in the way of the only proper adjustment of the Irish Question by the pig-headed opponents of the Grand Old Man. A small boy having chanced on a stray rough terrier unmuzzled incites him to bite the police.

A poetic scene this ! And now is the time to stand, a motionless spectator with an object, and without betraying outward symptoms of curiosity, to drink its poetry in. "Here are our young barbarians all at play !" But do not eye them too sympathetically, or they will think that you want to take a cab. For though all is peaceful now, but the wave of an arm, the motion of a head, in some cases when times are bad and



AT THE CAB-STAND.

London empty, an elevation of the eyebrows, will turn this scene of pastoral simplicity into a war of jarring claims.

And at the moment an enchanter who is to work this transformation approaches in the form of a weak-kneed old gentleman in a frock coat not of the newest cut, and having an umbrella under his arm which might not have been disclaimed by the partner of Betsy Prig. He pauses : he scans the peaceful scene with desiring eyes ; he faintly nods his head, and mutters "Cab." Verse alone can cope with the situation instantly created and which our artist's pencil has portrayed.

> "They heard and were abashed, and up they sprung
> Upon the wing, as when men wont to watch
> On duty, sleeping found by whom they dread,
> Rouse and bestir themselves ere well awake."

As seven cities claim the honour of Homer's birth-place so six drivers claim this fare : but the old gentleman, who knows his way about, has not yet cast the eye of his choice upon any particular cab. He surveys the scene of excitement that he has raised

placidly, and looks out for weaknesses in horses' knees, and rapacity in drivers' faces. Experience of the London streets has taught him to fly this combination of charms; and never, as it seems to him, has he seen the combination so palpably realized as is evidenced in the first cab on the rank. With a hesitating hand therefore—what storms will follow the signal!—he beckons the second. But this in the classic vernacular of the cab-stand is "Not playing it straight," at least not in the opinion of those who have not been called. They dismount from their seats in disgust, and indulge in horse play at the old gentleman's expense and at their comrade's who has been preferred before them. They shoot out the lip of the scorner at the make of the chosen cab, pretend to recognize a "Derby winner" in the wheezy chestnut between the shafts, and ask the driver imploringly to provide himself against the season with a regulation hat. Meantime the fare is seated. But to him, no sooner is he in this disadvantageous

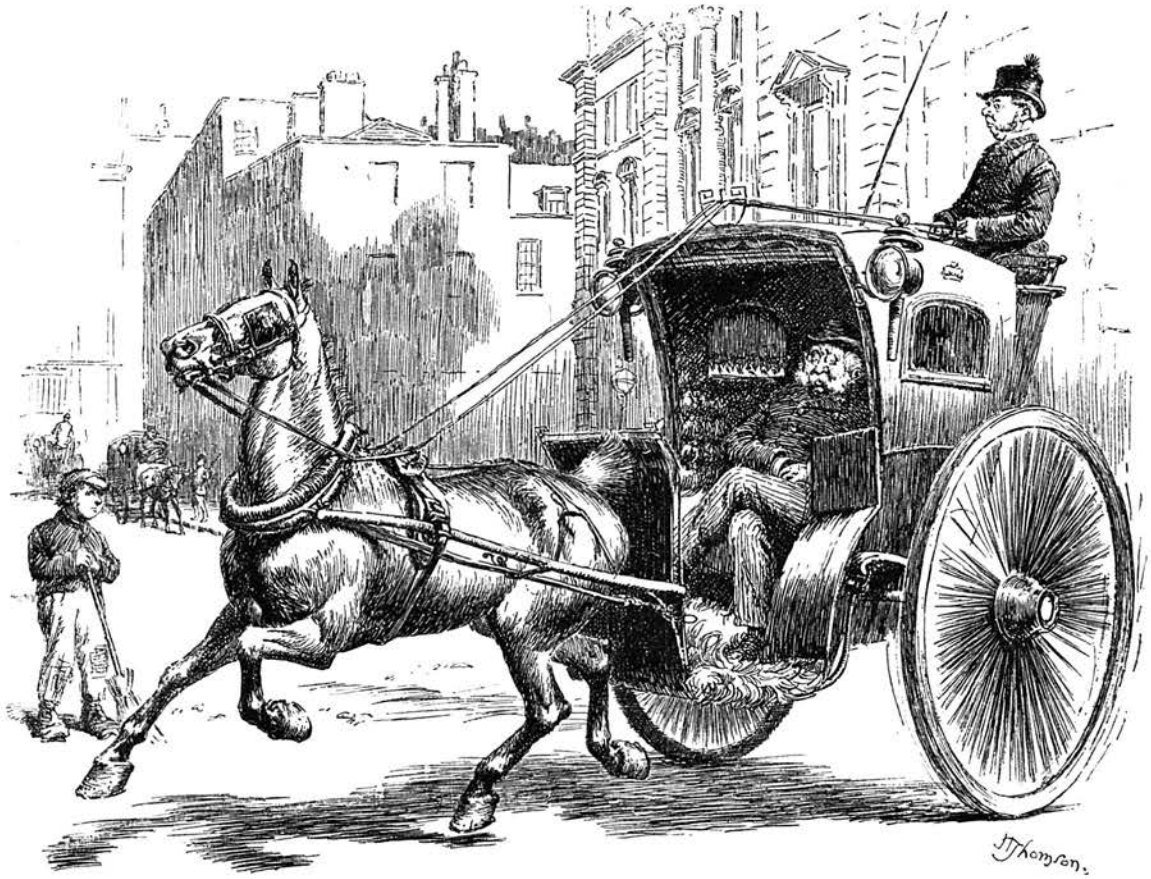
HAILING A FARE.

position, than appears the "hanger on" soliciting alms, on what grounds the old gentleman finds it impossible to conjecture. He has now to learn that the "hanger on" has shielded his coat tail with a dirty hand from a clean wheel. The cabman is told to drive on. The "hanger on" upon this joins himself to the company of scoffers at the corner of the street. Their jeers follow the offending cab till it disappears up a bye road.

The art of choosing cabs from a cab-stand, opens a wider range of the cab subject, namely, as to what kind of cabs are the best cabs, hansoms or four-wheelers. Here personal predilection must decide. I am unable to understand why hansoms are to be preferred. In my opinion they are the most ill-constructed vehicles that have been in use since the chariots of the Iceni, the plan of which they closely resemble.

It may be an advantageous thing for a half-naked savage to go into battle with his feet in the air; but the position hardly appeals to us as applicable to Piccadilly! Besides, can anything be more awkward than the getting into a hansom whose doors have been closed, unless it be the getting out of it on a rainy day, when philanthropy whispers you to close the doors after you? (Of course the doors which close with a spring, and

knock your cigar out of your hand when you least expect it, are Satanic inventions in coach-building in daily use on the embankments of the Styx.) Then what can be the advantage of being fixed between horse and driver in a position from which you can help neither and remain inaudible to both? You can see the *horse* it is true, or at all events his head; experience may tell you before it tells the driver the exact moment at which the horse is going to run away. But I don't know that it adds zest to life to see one's horse bolting if one can't get hold of the reins! The person one wants to see in this emergency is the driver; and he is probably climbing down behind! No, the hansom cannot rationally commend itself as a vehicle in any form except possibly as an air-catcher during sultry weather. But we have no summer now except in autumn, so where's the use of it? There is really no proper reason for its existing, as Paris has lately discovered. The Parisians will not stand the hansom though they ape our



A PRIVATE CAB.

fashions as much as in them lies. At hansoms however they have decided to draw the line. In the City of Civilization Shrewsburys were put to shame.

But if because a coach-builder chose to be eccentric and build an impossible carriage, and a deceased statesman elect to call it a London gondola, the London public have to suffer, what impulse—save the very midsummer madness of fashion—impels people to private cabs? Why this purchase of discomfort while anything else is left to spend money upon? Not that it is altogether unbecoming to see a doctor in a private cab, because he is just the sort of person always so full of fate that he ought to ride in a fiery-winged chariot heralding disaster, but why should men of means sacrifice themselves even in their carriages to the caprices of exploded fashion? Why should our exquisites appear before us as trussed fowls, and our warriors stare at us from inverted hat boxes tied to a horse's tail? Look at this veteran from Bengal in the drawing! He thinks he is going to the Oriental Club in Hanover Square, but he does not know where he is going, that is the truth; nor does the driver; nor does the small crossing sweeper eying him with a properly smiling contempt, and leaning on protective broom! And the strangest part of it is that this sort of vehicular mania is on the increase, for no proper reason that can be given. To instance the point: only a very short

time ago I met a very rich and young landed proprietor driving in a private hansom in one of the most deserted parts of Salisbury Plain. I felt very cross, and looked about for a bustard or a highwayman. But both being out of fashion neither of course was to be seen.

How much better than this craving after the monstrous on two wheels would be the institution of a reformed four-wheeler. Let it open its roof to that summer which may still be possible, if you will, but let protective capacity mark its first inception. Dwellers in a climate originated for wild ducks, let us at least have a public carriage plying for hire upon the streets wherein, by the assistance of a roof, two windows which shut and open in orthodox style (shut for choice), and our feet on the opposite seat, we may ride for a given sum a mile, as comfortably as people may who live in a free country, pay the Queen's taxes, and see the sun occasionally for two months in the year. And when I plead for four-wheelers I do not champion solely the

A RACER.

existing order of things: I revel no more than any one else in musty straw and unspeakable rattle, and in a broken-down racer long oblivious of the fiery scenes of his youth, a crippled flyer of sixteen who has in the far long ago won selling plates at crack meetings, but who can now only crawl pitifully over pitiless streets! No, if we have four-wheelers let us have them reformed. Let us reform them altogether. If the driver be more at home in the disguise of a private servant, let him so be disguised. India-rubber tired wheels are no things to shoot the lip out at—provided they are four wheels; a cord even, designed to divert the erratic tendencies of coachmanship, may be permitted. But let us have no more strainings after the chariots of barbarous ancestors, or be deceived into the belief that because a hansom badly driven goes in shoots calculated to destroy digestion, and London streets, some of them, are narrow and murky, that we are riding in a Venetian canoe.

This arriving at Venice suggests that I am digressing a little more than allowable in a paper labelled "Cabs," and that it is time perhaps that cabmen should have a small space given them, since I certainly believe them to be in the main as honest and hardworking a race, under more than ordinarily trying conditions, as any banded body of ill-used labourers, over whose wrongs princes of church and city have made effectual moan, and whose surprisingly improved condition in temper and the world's goods have recently been ventilated in the columns of the daily press. No! Cabmen up to

now have not appealed (with one or two brilliant exceptions) particularly successfully to the philanthropists of the world. Perhaps the constant strain of a hazardous life led under cruel climatic conditions has tended in the main to make their exterior man sullen and repellent; perhaps the feeling (unaccountable surely where charity is concerned) that the cabman's box is very often the last resting-place of abused or wasted opportunity (the "Why, Bill, we remember the time when you druv' yer own kerridge" of the drawing is no such unlikely apostrophe as may be supposed); perhaps, I say, feelings or kindred feelings induced by such experience may have

"WHY, BILL, WE REMEMBER THE TIME WHEN YOU DRUV' YER OWN KERRIDGE."

tended, where this class is concerned, to shut the purse of pity. But it should not be so. Philanthropists should recollect that this class, often suffering and degraded, are exposed to peculiar temptations, and that their hours of trial cover a long stretch. Many hands are against them—the hand of the policeman so often over-officious, continually calling upon them to "move on"; the hand of the fare, who requests them to drive him to the Strand entrance of Devereux Court, and then repairs secretly to the Embankment *viâ* Essex Street; the hand of the Corinthian of the period (that strange revival of the Regency flourishing in stranger sporting clubs), who, in the fearless old fashion, drink with their cabmen *en route;* lastly, the implacable voyager, who holds that all cabmen are liars and every distance under two miles, who believes in no certainty save the immovable fixity of the shilling fare, whose every look at a driver portends a summons, and whose sole literature, when unprovided

with a copy of the Statutes at large, is a dreadful red book entitled, *Hackney Carriages. Distances measured by authority of the Commissioner of Police of the Metropolis, and Regulations made by the Secretary of State.*

Against these many obstacles to rational enjoyment the cabman has to struggle. And who shall as an observer say that they do not in a majority of circumstances struggle against them with an admirable reserve of tact and temper? often melting hard hearts with a respectful insistence on fair rights; sometimes extortionate, but not more so than our butchers, grocers, and bakers, and with more humanity on their side; and continually lightening their own hard lives and the murky monotony of the streets with a flow of humour, sounding often, it may be, strange to ears polite, but always unforced, virile, and English.

Yes! If as a race their troubles are heavy, they are troubles borne with a light heart—with such a lightness of heart, with such a rollicking humour indeed, as is contagious to anybody who takes the trouble to observe it, and to which the artist here has given such feeling and permanent form.

CHAFF.

DEVONSHIRE COTTAGE COOKERY.

WITH A DOZEN ENGLISH RECIPES FOR NOVEL DISHES.

EVERY one who visits Devonshire remarks on the rosy-faced children that stand at the cottage doors; a pretty sight, indeed, when the cottage is neatly thatched, and has a rose-bush or a fuchsia tree growing against the wall, the flowers vieing in color with the little ones' cheeks. The children stare with big eyes, and bob a respectful curtsey as the gentry roll by in their carriages or as the Squire stops in his morning walk to greet them. What is the cause of these ruddy faces? Ah, that is a moot question! Some people will tell you that they are due to the soft climate, others jokingly suggest that as the soil is colored by the old red or Devonian sandstone, and as we are all made of dust, ergo, Devonians have redder cheeks than the rest of the world; such cheeks as have won them the nickname of "Devonshire Dairymaids." Yet others maintain that the cottage children are such healthy looking specimens of humanity because they live on good, plain food. When this theory was suggested to me I thought I would inquire what their food was. My first queries were met with, "Bread and cheese. Nothing but bread and cheese;" but at last I had an opportunity of obtaining a more satisfactory reply, and the recipes below were given to me. But aside from these dishes I am told that the children live chiefly on bread and skimmed milk and bread and bacon dripping, these being varied by bread and treacle or vegetables, which latter forms the main-stay of the older members of the family.

But let us suppose ourselves on intimate terms with the inhabitants of that pretty little cottage on one of Sir Richard ——'s farms. The walls, made of the clay soil, plastered and whitewashed and roofed with rich brown thatch, form a good background for the red rose that clambers up the diamond-paned lattice windows. On entering the low door when we go to call, we find ourselves in a tidy living-room, but scantily furnished, with a carved oak chest and straight-backed chair which would charm the collector's eye. A small fire burns in the grate and the table is spread for tea; the cloth is white enough, but on close examination we find it is constructed somewhat on the same principle as the gay patch-work quilt that adorns the "four-poster" upstairs, only instead of colored calico it is made of odd bits of material once used for the children's pinafores or mother's aprons. The cups and saucers are of various designs. The brown earthenware tea-pot has a broken nose, and there is a decided lack of "heavy English plate," for the father of the family is a laborer earning only 12s ($3) a week—none too much to provide for the needs of his eight children. To be sure he pays only about 3£ ($15) a year for his cottage, with its strip of garden, where he can raise enough vegetables for the family, cultivating it before and after his work; there is room, too, to keep a pig, and this same pig, or his successor, does much towards the housekeeping. They say, "the Michaelmas pig pays our shoe bills, the Christmas pig we eat and the Ladyday pig pays the rent," for it is at those seasons that they kill the pigs. This laborer has certain privileges that enable him to make his low-rate wages last longer than they otherwise would. For instance, when a tree is felled in the park the top branches are sold at a very small sum so that for 7s 6d ($1.75) he can get enough firing to last him nearly all winter, with the addition of a little coal. He can, also, buy for a penny a large bowlful of rich dripping from the kitchen of Sir Richard's house (the money received in payment for this goes to some more needy person). Moreover, he is a member of "The Club," paying 5s a year ($1.25); for this the doctor attends him in illness and when he dies the club fund provides for his funeral. His wife belongs to the clothing club, managed by the vicar's wife; to this she pays 3d (6 cents) a week, and to every shilling thus laid by the lady adds 3d, so that by the end of the year she has 16s ($4) to her credit, and she receives clothing, blankets or what she pleases, with that amount. Besides this, as they have a family of more than three children, they are given coal tickets, entitling them to a reduction in the price of coal bought of a certain dealer.

But to return to the subject of the food of my laboring friend. The father himself will have his breakfast early and start off to work, taking with him for his luncheon a quart of cider in a tiny keg or kilderkin (carried by means of a thong), and a "pocket cake," as he calls the small loaf of bread made of unbolted meal. (They will often get the grist from the mill before it is bolted, then by putting it through a sieve they separate the meal from the chaff—the latter goes with the "scruff taties" to feed the pig.) The family breakfast will be ready about 7.30 a. m., and it generally consists of *leeky broth* or *flicker meat*, or bread and dripping, the mother having for herself a cup of tea. On Sunday morning they vary this with a favorite dish—fried potatoes and bacon. Dinner is eaten about midday, when they will have a crocktul of boiled potatoes, a piece of bacon or salt pork, with cabbage or any other vegetables they can get. The father and mother wash this down with a little genuine Devonshire cider. Sometimes, but not every day, they will enjoy the luxury of having one or other of the pies or pasties made according to the recipes given below. The next meal is about five o'clock, when they have tea with bread and dripping or potato cake (more generally known as *tatie* cake). The menu for supper, at 7 o'clock, will be bread and skimmed milk cheese and the potatoes left from dinner *hotted* up. After eating this meal they are ready to go early to bed in the long winter evenings in order to save lights and fuel. I ought to mention that the laborers on the farms can buy of their employers three pints of skimmed milk for a half-penny, and a pound of skimmed milk cheese for 2d.

American ideas of comfort and neatness might not accord with that practiced here, where a picturesque flitch of bacon and bags of herbs hang from the rafters, while the seed "taties" are tucked under the bed. In some of the farmhouses, but seldom in the cottages, still remain the great, open fire-places, fit for "Yule logs" and ashen faggots, with huge steel crooks for suspending the three-legged crocks over the fire; and for lack of an oven the baking is done in a big baking kettle; hot coals are put in at the bottom of this, then the tin containing the cake to be baked, well covered over, and on top of that, more hot coals. It is not so simple a process as it sounds for it requires skill and wise judgment to brown, without burning, the cake. Some of the pies and pasties given below are cooked in this way, and are called "crocky pies" or "crocky pasties," and this is the only proper way to make the famous *squab pie*. The story of this dish may not be familiar to my readers, so I will mention that the legend runs to the effect that on some occasion an old man and his wife determined to have a treat, but they could not agree what it should be, one wanted an apple pie and the other a meat pie, so they at last made a compromise, after a long *squabble*, and the result was known as squab pie, which is made as follows:

Squab Pie.

Take the remains of any cold meat (pigs' feet are often used or bits of pork), four large apples, two Spanish onions, a teaspoonful of pepper and a dessertspoonful of salt. Put all together in a large pudding-dish, add half a pint of water to make gravy and

cover over with a suet crust. Or another good recipe for the same is: Cut up equal quantities of apples, onions and potatoes, add some good-sized pieces of mutton and plenty of salt and pepper. Put all together in a deep pudding-dish, cover with plain pastry and bake thoroughly. A good plain pastry for this and the following pies is made of one pound of flour, one-half pound of dripping, a pinch of salt and a teaspoonful of baking-powder; mix with a little milk and water.

Leeky Pie.

Cut up a dozen leeks, put them to boil with enough water to cover them; when boiled strain off the water. Season with salt and pepper to taste. Put them in a pudding-dish, pour over one-half pint of buttermilk and a beaten egg. Cover with ordinary paste and bake.

Turnip Pasty.

Boil thoroughly one-half dozen turnips, mash them up, adding a teaspoonful of cream and seasoning with salt and pepper. Put paste around this mixture, like a dumpling, and bake or steam.

Potato Pie.

Slice eight raw potatoes and cut up into small pieces one-half pound of bacon. Line a basin with some suet pastry and put in the bacon and potatoes; add boiling water and a little flour to make gravy. Put to steam for four hours.

Potato Pudding.

Boil one-half dozen potatoes and mash them through a sieve. Beat up the whites of two eggs and stir into the mashed potatoes, add a tablespoonful of Scotch marmalade. Steam in a pudding-bag for four hours.

Pumpkin Pasty.

Boil a pumpkin and mash it up. Season with pepper and salt to taste and add a teaspoonful of cream. Make a pudding paste to put round it. Bake thoroughly.

In and Out.

Take one and one-half pounds of flour, one-half pound of suet, half a teaspoonful of salt, quarter of a teaspoonful of pepper; mix with a little milk and stir in four apples finely cut up. Boil for two hours.

Spotted Dick.

Take one pound of flour, one-half pound of suet, one quarter of a pound of sugar, two well-beaten eggs; mix thoroughly and add a little spice or nutmeg and a handful of raisins.

Flicker Meat.

Boil some milk and stir in enough flour to make it as thick as ordinary oatmeal porridge. To be eaten with treacle.

Leeky Broth.

Cut up and boil some leeks in enough water to cover them, leave them over night and the next morning put on and "hot" up, adding a little fat, and seasoning with salt and pepper. Put broken-up bits of bread in the children's basins and when the broth is boiling pour it on the bread and add a little milk.

Pumpkin Jam.

Cut up the rind of a pumpkin and put it to soak for several hours. Boil thoroughly with a little ginger and lemon peel.

—Frances B. James.

HOSPITALITY—VISITOR AND VISITEE.

Nine Rules for Visitors.

IT is safe to assume that few of us have not been either visitor or visitee. I have been both. Let me lay before the good housekeepers in council assembled a few thoughts that are the result of much cogitation and some talk on the subject. I am not prepared to say that the observance of these rules will make an agreeable guest of a disagreeable person, but I am prepared to say that utter disregard of them will make your hostess consult the papers to find the time of departing trains.

1. *Never give "pleasant surprises."*—Nobody likes to be taken unawares in the midst of possible house-cleaning, sickness, or even the weekly washing. Don't delude yourself into thinking that the pleasure of seeing you will compensate for the inconvenience caused by your want of thought. Unless you are exceptionally agreeable it will not do it. One of the chief pleasures of paying or receiving visits is in anticipation. There is nothing a hospitable housewife more thoroughly enjoys than putting the finishing touches to a guest's room and seeing that everything is swept and garnished ready for her welcome. The humdrum work of setting the table becomes a labor of love, and the children catch the infection and are ready to be seen at their best. Why spoil all this by dropping in unexpectedly, perhaps the very day before sweeping day?

Then, too, a hostess can plan for your comfort and her own convenience so much better if she knows you are coming. The cakes may be baked and the work arranged so that she can be with you; her friends can be notified of your coming, and little excursions and outings planned that you would doubtless miss in an unexpected visit. If you are a young girl, your "pleasant surprise" is not advisable, to say the least; if you are a housekeeper yourself, it is inexcusable.

2. *State beforehand the length of your visit.*—Every hostess wants to make the most of the time devoted to her. She cannot do this unless she knows what the time will be and can plan accordingly. It would be a disappointment to her to have crowded all your entertainment into one week and then find that the visit was to be lengthened out to three.

Be sure to tell definitely the road and train on which you will go, and, if your arrival is to be near the dinner or supper hour, whether you will have lunched on the train. It is hardly right to leave your hostess in doubt as to the necessity of waiting a meal for you when you could save her this annoyance by a word.

A lady, speaking of a minister who was a candidate before a church, told of a little piece of thoughtfulness of this kind that must have recommended him to the feminine part of the congregation, at least. He was to stay with her, and in a letter saying that he would be there at seven o'clock, he added, "I shall have had supper." She considered it a piece of rare thoughtfulness in a man and evidence of great good sense.

3. *Adapt yourself to the habits of the family visited.*—It often happens that the habits of visitee and visitor are greatly at variance, as, for instance, when the city visits the country, or vice versa. The city visitor may not be accustomed to rising till nine o'clock, but if the regular breakfast hour is half-past five, you are in courtesy bound to be ready for it. If you are so constituted that you cannot make such changes in your habits, *don't visit.* Being habitually late at breakfast is un-

pardonable rudeness in a guest. It is always well to inquire at night if a rising bell is rung and then time your movements accordingly. It is a well-meant but mistaken kindness on the part of many hostesses to let their guests sleep as long as possible—thus cutting short the dressing time—so it is always best to know the time given between bells.

Not less annoying to a housekeeper than late rising is too early rising. To one accustomed to country hours, it is doubtless very trying to rise at five and wait till eight or half-past for breakfast, but the remedy is in your own hands. You may lie in bed till half-past seven. But as you value the peace of mind and good will of your hostess, do not rise at five and descend to the family apartments. If one wishes to rise early and read or write before breakfast and it can be done without disturbing others, there is no objection to it; but never go down stairs until very near the breakfast hour. The living rooms must be swept and dusted and it is not pleasant to have visitors around while this is being done.

4. *Avoid giving unnecessary trouble.*—A thoughtless guest is seldom a very agreeable one. It may be only thoughtlessness that prompts one to prolong calls long past a hostess's supper hour, thereby throwing her and the cook into a state of nervousness and expectancy sadly destructive of a spirit of hospitality—but it makes one a very uncomfortable visitor to have, nevertheless. Indeed, it is upon such little things that much of the comfort or discomfort of receiving visits depends. A lady once told me of a visit she had had from two young nieces. She had a large house with several unoccupied bedrooms. "They are very nice girls," she said, "but they give me untold trouble by going into other rooms and lying down on the beds for a little while and then leaving them in that condition. I never have any assurance that there is a bedroom in the house in order."

To many housekeepers it is a great annoyance to have their guests' things—bonnets, parasols, work, etc.—left lying at random. One naturally wants to have the house in order when she has company, and yet how often it is the case that it is more disorderly then than at any other time! The housekeeper doesn't like to do too much picking up for fear of seeming annoyed by it, and the visitor is really the proper one to take care of her own things. It is specially annoying to some persons to have their guests leave their pocket-books and jewelry around. A lady is not always sure of her servants, and it is due her to take care of these things yourself. Keep them in your trunk, when not in use, and keep your trunk locked. Some hostesses specially request this.

Another thing to avoid is calling upon servants for extra services. If you have laundry work to be done, look up a laundress instead of asking the lady of the house to have it done for you, even though it may be but a trifling service. As a rule servants resent such things unless specially paid for them, and even then it interferes with the regular work. After a lengthy visit it is very proper to remember the servants with some little gift if you do not like to offer money. It is really much more sensible than the custom of feeing the waiters at hotels where your board is paid.

5. *Be helpful in an unobtrusive way.*—Adapting yourself to the manner of living and habits of the family will settle many little points just here. If you are visiting where there are several servants it would be considered an indiscretion for you to offer to help, but if your friend does her own work or has only one servant, there are many little ways in which you can assist her. Of course you will take care of your own room, but if there is sufficient intimacy you may do more without giving offence. You may wipe the dishes, make up her bed and help in many ways that will suggest themselves to you, but you must do it in an unobtrusive way—and *don't* go into the kitchen while she is getting a meal.

6. *Don't affect to be entertained.*—A hostess is necessarily out of the room at certain times of the day. Nothing makes her more uncomfortable than to go back to the parlor after such an absence to find the guest waiting stiffly for her return, without doing anything to entertain herself. It gives her a feeling of hurry and nervousness that is sometimes destructive of the pudding, to say nothing of the welcome. You can easily relieve her of this feeling by a little tact. You know that she will be busy for a while after breakfast. Take this time to go to your room to write letters, or take up the morning paper or a book, and when she returns let her see that you have been entertained during her absence. Have your fancy work or your crocheting and she will feel better about leaving you. When you know that she is specially busy take one of the children,—the most troublesome one—for a walk, or make a call; in short, when you know that she must absent herself, forestall her by making some excuse to absent yourself.

7. *Pay your own small bills.*—It seems sometimes almost impossible to do this. Occasionally your hostess will insist so upon paying for you that it is almost rudeness to refuse. Allowing for such cases, it is still true that, as a rule, it is better to pay for your trunk yourself than to let your hostess do it. It is really a part of your traveling expenses. Be on hand when the trunk comes and pay the expressman. You will find this much easier than making your hostess take the money after she has paid it. Supply yourself with change, stamps, and stationery before leaving home. When visiting in the city, buy your own street car ticket, then there will be no small talk over which shall or shall not pay. Have you ever thought how fast the nickles count up if one has many visitors and pays all the car fares?

8. *Don't fail to write on returning home, and express your pleasure in the visit.*

9. *Never retail family secrets learned from a lengthy visit.*—That every closet has its skeleton is truer, alas! than we sometimes think. A casual acquaintance seldom sees behind the door; a visitor sometimes has glimpses of what her friend would gladly keep to herself. It may be evidences of dissipation in husband or son, a tendency to sharp words from mother or child, pinching poverty, or respectable make-shifts that the world knows nothing of,—whatever it may be, if the secret is yours only by virtue of your entrance into the home life, it should be sacred. Your friend has taken you into her "holy of holies"—enter it not with irreverent feet, bring not from it a thoughtless tongue.

—Rebecca Hart.

AN ANCIENT PIE.

Sir Theodore Mayerne, physician to James I and Charles I, amassed a prodigious deal of wealth and wrote the great cookbook of the seventeenth century. Here is his recipe for "A City of London Pie:" "Take eight marrow bones, eighteen sparrows, one pound of potatoes, a quarter of a pound of eringoes, two ounces of lettuce stalks, forty chestnuts, half a pound of dates, a peck of oysters, a quarter of a pound of preserved citron, three artichokes, twelve eggs, two sliced lemons, a handful of picked barberries, a quarter of an ounce of whole pepper, half an ounce of sliced nutmeg, half an ounce of whole cinnamon, a quarter of an ounce of whole cloves, half an ounce of mace, and a quarter of a pound of currants. Liquor when it is baked, with white wine, butter and sugar."—Boston Journal.

The Kitchen Table.

A FEW CAKES, SOME OF THEM SPONGE.

Sponge Cake, No. 1.

Four eggs, one cupful of sugar, one cupful of flour, and a tablespoonful of lemon juice.

Sponge Cake, No. 2.

Two eggs, three tablespoonfuls of cold water, one cupful of sugar, one cupful of pastry flour, one teaspoonful of baking powder, one teaspoonful of vinegar or lemon juice as the last ingredient. This makes a small loaf. Quick oven.

Sponge Cake, No. 3.

Five eggs, one cupful each of sugar and flour, the rind and juice of a lemon. Moderate oven.

Sponge Cake, No. 4.

One cupful each of flour and sugar, four eggs, one teaspoonful of baking powder; vanilla to flavor.

Sponge Cake, No. 5.

Three eggs, one cupful of flour, one cupful of sugar, one-half cupful of water, one and one-half teaspoonfuls of baking powder; flavor.

Berwick Sponge, (a very old rule).

Put together in order, three eggs (beat one minute), one and one-half cupfuls of sugar (beat two and one-half minutes), one cupful of flour (beat one minute), one teaspoonful of cream tartar, one-half cupful of cold water (beat one-half minute), one-half teaspoonful of soda, lemon and salt, one cupful of flour (beat one minute).

Cornstarch Cake, No. 1.

Four eggs, one-half cupful of milk, one-half cupful of butter, one cupful of sugar, one and one-half cupfuls of flour, one-half cupful of cornstarch, two teaspoonfuls of baking powder.

Cornstarch Cake, No. 2.

Whites of six eggs (well beaten), one and one-half cupfuls of sugar, the same of flour, one-half cupful of cornstarch, one-third cupful of butter, one-third cupful of milk, one and one-half teaspoonfuls of baking powder.

Berry Cake.

One pint of flour, one cupful of sugar, one egg, one and one-half teaspoonfuls of baking powder, butter the size of an egg, salt, one-half pint of blueberries, made soft with milk, about one cupful.

—*C. H. S.*

OLD-FASHIONED SEED CAKES.

These are easily made by any one who has mastered the mysteries of rolling out a cookie. Mix a cupful of butter with two cupfuls of sugar. Add half a cupful of water, three well-beaten eggs, and two tablespoonfuls of carraway seeds. Put two cupfuls of pastry flour in a sieve with a teaspoonful and a half of baking powder. Stir this in, then add another cupful of sifted flour. This should make a batter almost as stiff as dough. Turn it out on a floured board, sprinkle it with flour, and roll it out until it is about an eighth of an inch thick. Cut these cakes out in rather large cookies, and bake them in a moderately quick oven. They should be crisp like an old-fashioned ginger-snap, and will improve with keeping. If you wish them soft (as some people do), keep them in a stone jar in a cold place; but if you wish them crisp, keep them in a tin box in a perfectly dry but not a hot place.—New York Tribune.

FRUIT PICKLES.

Delicious Relishes for Dinners and Lunches.

HAPPY is the housewife who, by repeated and careful experiment, has fathomed the possibilities of even one of the excellent fruits that abound in our temperate climes. Every summer I have the good luck to add to my collection of recipes some new combination or adaptation of pleasant flavors to delight household and guests. And when I am thus fortunate, I wish to bring my friends and neighbors together, as the woman who found her lost piece of silver did, and say, "Rejoice with me over this." They do not always rejoice, for they seem to think that my discoveries are not always worthy of the name, and they sometimes criticise the flavor of the discovery, which is cruel. We think of fruits as suitable for refreshing desserts, as combining with sugar to make rich dishes without number. But we should not forget a whole province of their virtues, in furnishing delicious relishes to eat with meats. Happy the woman—would I knew her name so that I could canonize her!—who invented sweet pickles. I fear she was a man, but in the absence of record on the point, I shall give my sex the benefit of the doubt.

I have one friend who is so old-fashioned, or rather so *odd*-fashioned, that she characterizes my spiced fruits as anomalies, and as a grave misuse of excellent sugar and vinegar—both in themselves good gifts of Providence, but perverted to uselessness by their unnatural union. I tell her in reply, that she is an anomaly, lacking the appreciation of true excellence.

But I am inclined to think that the sweet pickle is an invention of very modern times. I have an excellent cookbook which was published in 1857, which, I notice, has not a single recipe for a sweet pickle in it, although it is so complete that it is a perfect cyclopedia of good recipes on all other subjects.

PICKLED LEMONS.

This volume gave me, however, three recipes for *sour* fruit pickles. Of these the pickled lemons are very excellent for a relish of that kind, but when I make it for myself, I throw into it a double handful of C sugar, which improves it wonderfully. You must have firm, small lemons of the best quality for this pickle. Cut them deeply with several incisions from end to end, and fill the cuts with salt, put each on end, and lay them in a dish in quite a warm place. The salt will dissolve and make quite a brine. Let them remain in this for three weeks, taking them out occasionally and rubbing with additional salt. Then take them from the brine and put them in a jar, with a large tablespoonful of mustard seed, half a pound of bruised ginger, two ounces each of cloves and all-

spice, and a very little turmeric, and three or four chilis. Boil all this in vinegar and pour it over the lemons. In about six months they will be ready for use. This pickle will keep for years, and increases in excellence as it grows older. Since the California limes have come into the Eastern market, I have tried pickling them by this recipe, adding yellow sugar to the vinegar. They are ready for use in about eight or ten weeks and form a very delicious pickle, not surpassed by the best bottled pickled limes of commerce.

PICKLED PLUMS.

Take green gage plums while they are actually *green*, *i. e.*, before they are ripe, and put them in an earthenware dish over the fire, with vinegar, salt and a little fennel seed and dill. This should be put over the fire first and allowed to boil, then skim and put in the plums. Let it all boil again, then take it off, let it stand until cold, and then put it away in jars, and do not use for about three months. If you are careful to use no more of the fennel seed and dill than will impart a slight flavor to the pickle, your plums will taste very much like olives, and if you use the small damson plums (when green), they look so much like olives that they might readily be taken for them.

PICKLED GREEN PEACHES.

This is also a recipe from my forty-year-old authority. Take full-grown peaches, but perfectly green; rub them well with a flannel cloth, and put them into a stone jar. Put over the fire a gallon of pure vinegar, to which add half an ounce each of cloves, peppercorns, sliced ginger and mustard seed, and a little salt. Boil it, and pour it over the peaches while scalding hot. On the following day, pour off the vinegar, boil and pour again over the fruit. Do this for five or six successive days, then put the pickles away to stand a month before using.

SWEET PICKLES IN GENERAL.

A general rule for the preparation of all sweet pickles, especially when made of fruit, is to add to each quart of vinegar two pounds of dark brown sugar. Heat together and skim thoroughly, for this sugar is altogether unrefined and usually has sticks and so forth in it. I also generally strain the liquor, after skimming, through a piece of firm muslin cloth, to remove all sediment, dust, etc., that may have been in the sugar. Then put over the fire and add the spices thus: half an ounce each of allspice, cinnamon, cloves and mace, also a spoonful of mustard seed, a few pepper corns, and a piece of ginger root. If I use these spices unground, I put them into a bag of netting; if they are ground, into a bag of flannel, or muslin of fine texture. I prefer the unground spices. The spices should be put in the hot vinegar for about an hour, then taken out and the fruit put in, on top of which lay the spice bag. Cook the fruit, whatever it may be, very slowly, and remove all from the fire when this is quite soft. It is well also to add a very little salt to the vinegar while it is boiling. Different fruits, also, you will find by experiment, are improved by the addition of different spices of peculiar flavor, as a very little tarragon or turmeric, or a very few chilis. No strong flavors should be allowed to mar the delicacy of fruit pickles. The mixed spices that are now sold in the stores are used by some housekeepers in their sweet pickles, but I do not like their flavor at all, it is much too strong, and kills the delicious fruit flavor so desirable in these pickles.

SPICED CURRANTS.

These form one of the most delicious meat relishes that the garden affords. Take two pounds of sugar, one pint of vinegar, a teaspoonful each of mace and cloves, and half a teaspoonful of cinnamon, the same of allspice, and a small piece of ginger root. Use the ground spices and put them in a muslin bag with half a dozen peppercorns, and then put them into the boiled and skimmed vinegar and sugar. While hot, put the currants in and allow them to cook gently for about ten minutes. Then put all into a stone jar, cover it and put aside to cool. The next day drain all the liquor from the currants, heat it, and pour it (boiling hot) over the fruit again. I always do this for six consecutive days, boiling down the liquor the last time till there is just enough to cover the fruit. It is very rich and nice.

PICKLED CHERRIES.

I have found the following rule for these pickles an excellent one: Take fine, large cherries, and do not stone them, or take off their stems. Use to one quart of vinegar three pounds of sugar and five of fruit. Add one teaspoonful of ground cloves, one of allspice, and half a teaspoonful each of mace and ground ginger, all tied up in a bag. Boil and skim sugar and vinegar in the usual manner. Then put all in a porcelain kettle, and simmer slowly until the cherries are quite cooked—about three-quarters of an hour. Then take out the cherries carefully and put them in a jar, and boil down the liquor for about an hour before pouring it over them. They should be sealed while hot in jars. They keep in excellent condition for two years or more.

PICKLED APPLES.

These form an excellent staple pickle, cheap, and well suited to the appetites of a large, healthy family. Any apples of good flavor will serve the purpose, but sweet apples are to be preferred, as the tart apple stews so soft that much skil is required to keep it from being converted into a mass of "pickle jam." To seven pounds of apples (peeled and quartered) add one quart of vinegar and two pounds of sugar. When the sirup has been clarified, put into it a teaspoonful each of cinnamon, cloves and allspice, and a large piece of ginger root. Cook the apples in this till they are quite tender, but not boiled to pieces. Then take them out and put them into a

stone jar, and boil the sirup till quite thick, and pour it over them.

PICKLED PEACHES.

There is no more universally approved pickle than this. Take good, ripe peaches—freestones, if you can get them, if not take the Lemon Cling, whose excellent flavor will in a measure make up for the annoyance of the adhesive pit. Peel the peaches with a small, sharp, silver knife, or remove their skins by the quicker process of soaking them five minutes—not more—in boiling water, then throwing them into cold water, and rubbing with a rough towel. The skin of the fruit will come off by this process with the utmost ease. Have your spiced vinegar ready, well skimmed and boiling. A safe proportion is one quart of vinegar to three pounds of sugar, into which put in a gauze bag, half an ounce each of stick cinnamon and whole cloves, with two peppercorns and a piece of ginger root as large as your thumb. Put in fruit enough to be quite covered with the liquor—the amount as above directed will take about seven pounds of the peaches—and put a plate over them while cooking to keep the top layer from rising out of the liquor. Then simmer gently till the fruit is quite soft, when it should be carefully taken out and put in a stone jar, and the vinegar poured over it while hot. Seal immediately and put away.

PICKLED GRAPES.

Take seven pounds of California grapes (on their stems), and dip the bunches gently into water to wash them quite clean. Then, to one quart of vinegar add four pounds of brown sugar, and put in your spice bag a large tablespoonful each of ground cloves, cinnamon, ginger and the same amount of grated nutmeg. Boil all together and clarify, and then pour it over the grapes, putting a plate on the fruit to keep it well covered by the liquor. Every other day for a week drain off the vinegar, boil, and pour it over the grapes again. They are then ready to be put by for use.

PICKLED PEARS.

The little brown Seckel pear is incomparably the best for this pickle. To one quart of vinegar put two and one-half pounds of sugar, and for spices a tablespoonful each of ground cinnamon and mace, half that amount of cloves, a pinch of mustard seed and a small piece of ginger. To this put five pounds of fruit, cover and simmer till tender. Then take out the pears, cook the sirup down, pour over the fruit and seal in glass jars.

PICKLED PINEAPPLE.

A delicious pickle may be made of pineapples. Slice the fruit, which should be firm and ripe, quite thin and put it into a large, stoneware dish. For the sirup, take two pounds of sugar to one pint of vinegar, and spice with one heaping teaspoonful each of ground cinnamon and mace, half as much cloves, and a piece of ginger. Pour this hot over the fruit, and let it stand till the next day. Then pour off and heat again, and again turn it over the fruit. Repeat this, for four successive days, then put all away in jars.

PICKLED MUSKMELON.

This can be made with the ripe melons peeled and cut in thick slices, using just the same proportions as in making the vinegar sirup for the pineapple. Ripe cucumber can be pickled in the same way, but is much inferior in flavor to the other.

PICKLED PLUMS.

Take fine, large, ripe blue plums, or green gages, and prick them well with a needle. To eight pounds of the fruit one must allow a quart of vinegar and three pounds of sugar, spiced with half an ounce each of cinnamon, cloves, allspice and mace, a pinch of mustard seed, and five peppercorns. Prepare the vinegar, sugar and spices, and pour, when scalding hot, over the fruit. Let it stand three days, pour off the liquor, boil and pour on again. Do this every three days for six times before you put the fruit away.

SPICED QUINCE.

For this I take the pulp of quinces after I have made jelly from them, and mindful of the need of *some* quince flavor remaining, I do not squeeze the pulp altogether dry. Then I take for four pounds of this pulp, a pint of vinegar, two pounds of sugar and a teaspoonful each of cinnamon, ginger and mace. Put the spices in a bag, and with the fruit into the sugar and vinegar, simmer slowly over the fire for two or three hours, then seal in jars.

PICKLED RAISINS.

To two pounds of brown sugar and one pint of vinegar, add a teaspoonful each of cinnamon, allspice, cloves and mace in a bag. Heat, skim and pour it over two pounds of large raisins on their stems. In two days put all over the fire, and let it simmer very slowly for fifteen minutes, then put away for use. Crystalized figs or apricots may be pickled in the same way, but I use fully one-fourth less sugar, and do not put it over the stove, but complete it by pouring the sirup over the fruit a number of times. These pickles are delicate and delicious.

PICKLED FRESH FIGS.

This is a dainty in which California housewives have long indulged, but only recently have those of the central states had the opportunity to enjoy this fruit fresh. For a pickle it is incomparable. I use not more than two and one-half pounds of sugar to the quart of vinegar, the fruit being very sweet. For spices, I take the four kinds, cloves, allspice, cinnamon and mace, and add ginger root, with mustard seed and peppercorns, a very little of each. I boil the figs with the spices in the clear sirup, very slowly, and put away hot in glass jars. If they can procure this fruit fresh, I trust all my readers will test the excellent results of this recipe: they will not be disappointed.

—Eunice C. Corbett.

HUNGARIAN EMBROIDERY.

By JOSEPHA CRANE.

ALTHOUGH in the high pressure of nineteenth-century life there seems to the busy to be very little time to spare, still it cannot be denied that embroideries are very much before the public, that new kinds are as constantly to be seen as are the old ones revived and not allowed to remain obscure any longer. It is very pleasant, too, to notice that these are more or less artistic, and that the people who find or make time for work like as a rule to have it beautiful.

On the Continent the fascinating embroidery called Hungarian has been known for some little—beyond I mean that charming country east and south of the Danube where it has been done by the peasants from ancient times.

These poor people, uncultivated and rough, have worked on, as time progressed, producing pieces of work which as we look at them after the lapse of years are still handsome, the colours but little faded. Their sense of true art has made them ever select designs which were good in themselves. There is but little variety, for in the most elaborate pieces I have ever seen, the same pattern with but slight changes are repeated with but little alteration; and yet infinite variety can be had, and no two pieces look alike, this resulting from the fact that the design is differently adapted and the stitches, few indeed as these are, are used in many ways. Never more than three colours are used—red, dark blue, and a curious shade of yellow which is rather like gamboge in colour.

These cottons are worked upon coarse unbleached linen, grey or clay coloured, and the uses to which the work is put are numerous. Bedspreads, aprons, table-cloths, side-board cloths, cosies, mats, book-covers, curtain-borders, cushions, etc.

In choosing your linen you must be careful to get what is not white, as what is called unbleached or grey is far better. Common towelling is not good enough, but you can get linen that does very well inexpensively. If you have linen that pulls with your needle, it does not look at all well and it does not wear.

The cottons are the famous D. M. C. *Coton à repriser*. This is a strand like filoselle, there being four threads to each collected thread. Do not separate it, but use it as you cut it from the little round balls which cost but a few pence each.

If you never intend to wash what you are embroidering you can work the cottons as they are, and send the article to be cleaned when it is soiled. This I will admit is the best plan of all, for to wash the work never answers so well. If, however, you are bent on doing this, you had better see that the colours are fast before you begin. The red I am certain of, the blue I am doubtful of, and the yellow I do not believe likes the wash-tub at all, and does not leave it without a very pale complexion.

If you want to test the fastness of the dyes, you should loosen the balls and pour boiling water upon them, leaving them to soak for about a quarter of an hour. Soap and rub them lightly with the hand, and go on rinsing them in cold water, unless the latter is quite colourless.

Squeeze the water out carefully without wringing the cottons, and let them dry quickly without letting them be at all exposed to the sun.

Some people think coloured cottons should be washed in vinegar, because it is thought that it affects the colour less than water does. However, other people think that good dyes keep their colour without the aid of vinegar, and the bad ones wash out in spite of it. Fast colours lose none of their beauty in the process, and the latter does not affect the quality of the cotton. Indeed, it rather improves them sometimes, for it rids the cottons of any excess of colouring matter which the fibres of the cotton may have absorbed while they were being dyed.

In working you should not twist the cotton, but let it lie flatly, and though you should on no account pull it, yet if it is too loose it is very ugly indeed.

Now as to the design. If you can draw at all you are an independent person, and with

FIG. I.

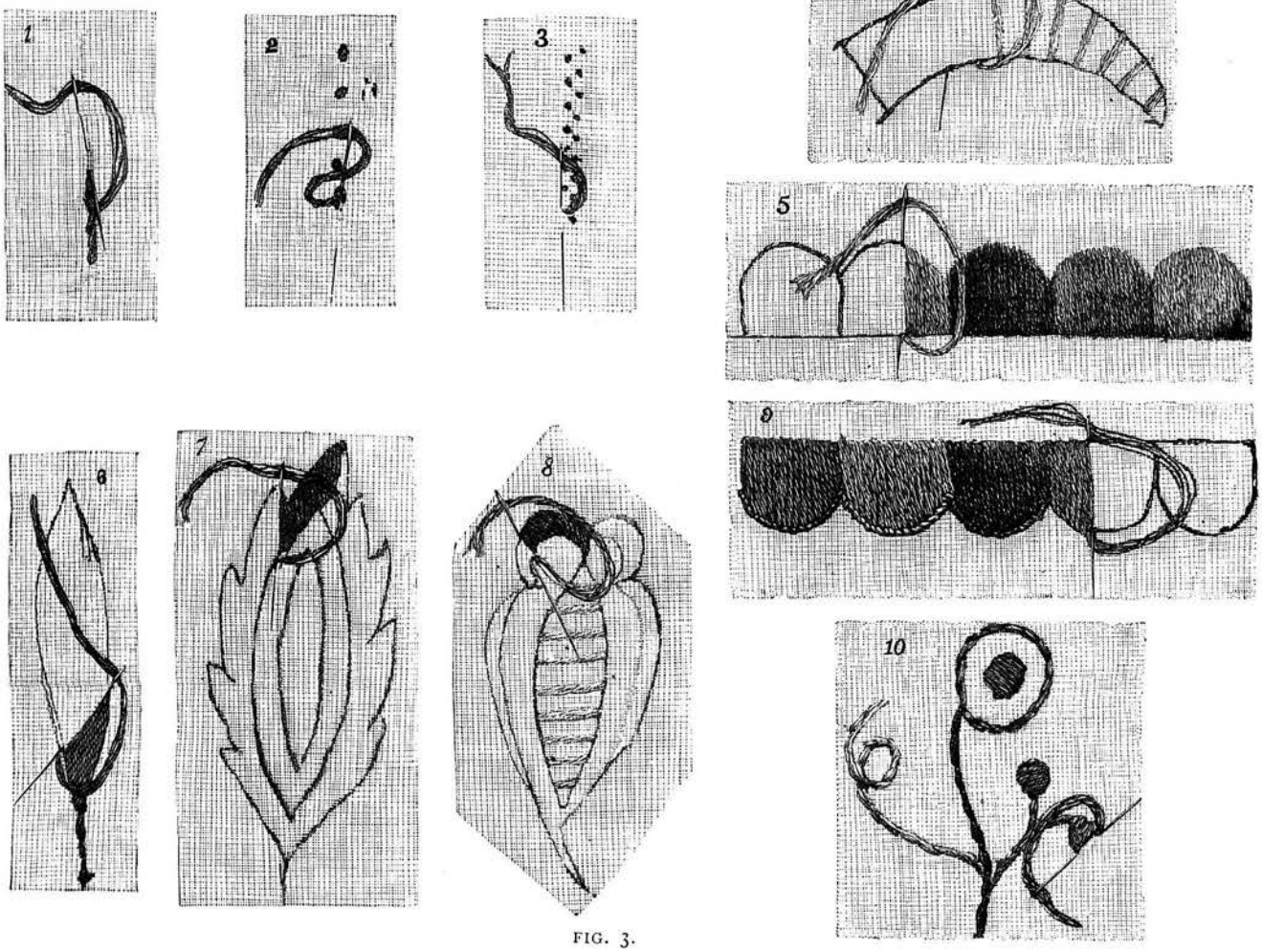


FIG. 3.

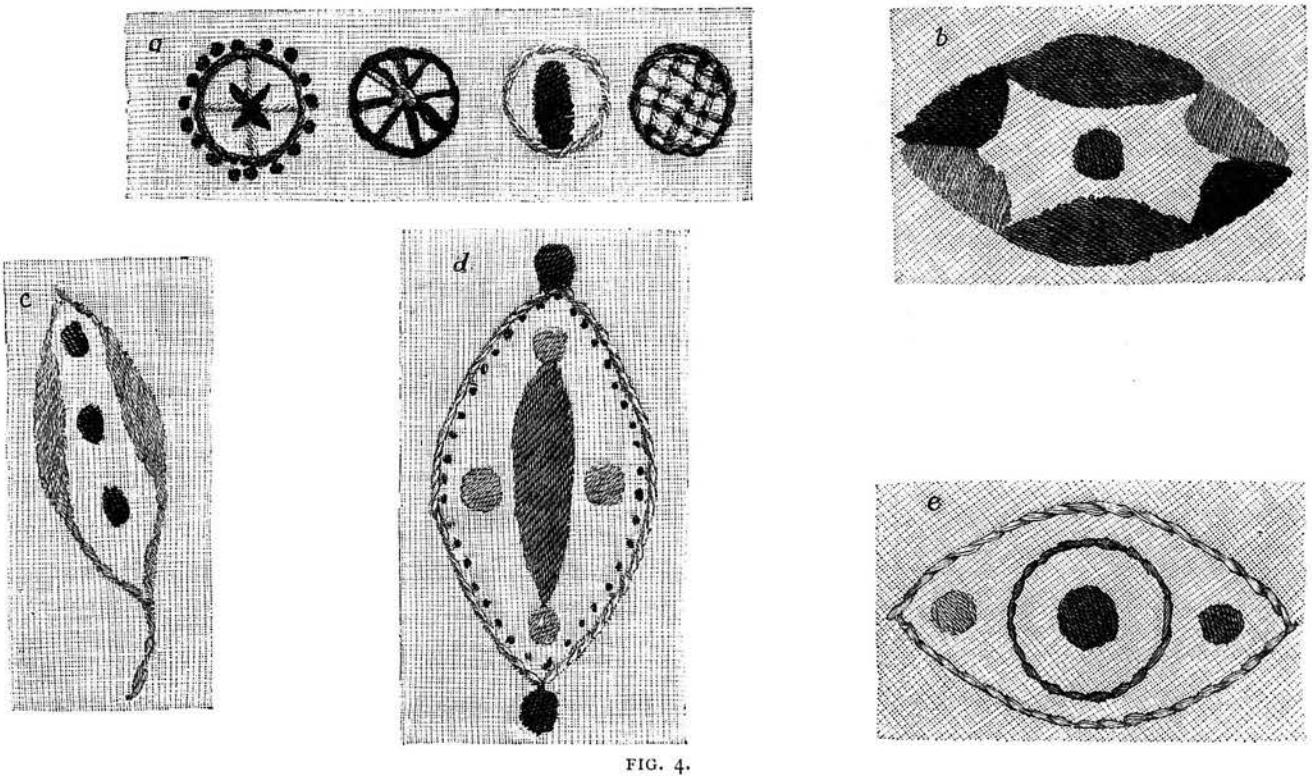


FIG. 4.

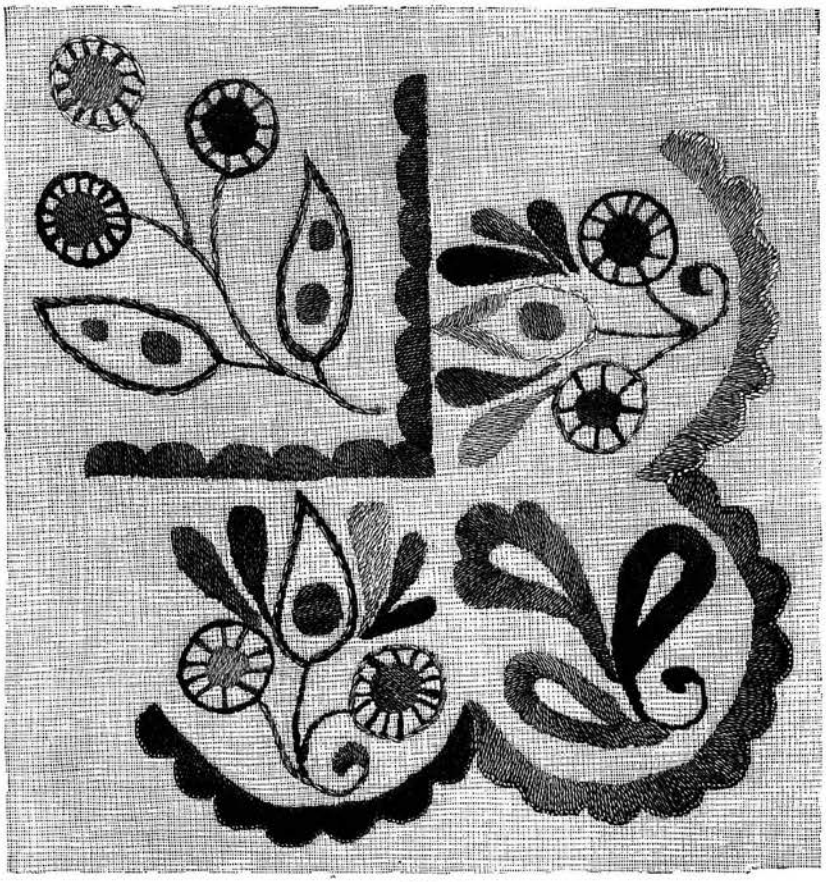


FIG. 2.

the help of our illustration, you can very easily make a pattern for any article upon which you intend to try your skill.

Scrolls, conventional leaves and flowers, large, bold, and very clear, dots and balls, there is very little else, excepting the scalloping which is a great feature in the work. This latter you can trace very easily with a farthing pencilled two-thirds round, if you draw lines first of all to have it perfectly straight and accurate. Please note that simple as the bordering is of the mat before you in Fig. 1, that it is perfectly straight, and that the scallops are even and all of the same size, the balls in between being at regular intervals. The leaves, etc., are careless looking—that is another feature of the embroidery, yet each leaf or petal has a true edge, and any lines such as are in the ovals in the corners are not zig-zag, or crooked in themselves.

This illustration is of a mat, the design one which could be used in a variety of ways. The middle spray could with little alteration form corners for a tea-cloth, and strewn over a bedspread, would look very handsome. With a few more leaves and curves, and making it shorter, you could use the design for a tea-cosy. Should you be unable to draw, yourself, you can get good designs and materials, and the work begun by addressing yourself by post to Miss Baker, 5, Clifton Gardens, Chiswick, W. She will provide linen, cottons, etc.

Use crewel needles, and be sure to have them with sufficiently large eyes, as when the eye is too small it only frays the cotton, and is very uncomfortable to work with. Just as a man instinctively picks out the biggest needle he can find when, in the absence of his womenkind, he has to sew on a button or mend a garment for himself, so a woman often has the idea that the finer needle she takes, the better her work will be. This in fine cambric, etc., may be true, but not for work of this kind.

Fig. 2 shows a corner which would do nicely for a tea-cloth, or if not used as a corner simply for a border, repeating the flowers alternately, one set with the other. This design I copied, part only being original. In the mat the outer scalloping was done in threes; three scallops red, three blue, three yellow, and repeated. In the inner border the scallops are one red, one blue, one yellow, then again as before. In the inner border of this corner the scalloping done in simple satin-stitch is red, and as a large scallop in the outer edge contains several smaller scallops, I have made all the latter of one large scallop in red, the next blue, the next yellow. All this arrangement is governed by the fancy of the worker, and upon the skill in using even these three colours will much of the beauty of the work depend. Until you have seen it for yourself you can have no idea how very handsome this embroidery is. There is something *bizarre* about it, and daring as it is, and gorgeous as is the effect, it is perfectly harmonious and artistic.

In some Hungarian work which I have seen the outer scallop is not done in button-hole stitch, but in satin stitch. This does not cut out as well as the button-hole, and I do not myself like it as well as the latter. I have left the scallop here, not cut out, so that you can see the effect of another plan, which is to leave a little of the material beyond the scalloping, and then to finish it off with cord and tassels, which of course must match all or some of the colours used in the embroidery. A fringe of the same can be used with this arrangement, but I myself prefer the cut-out button-hole scallops to any.

I now come to the stitches. These are wonderfully few, and they are all of them quite easy to learn, though unless carefully executed they are not at all pretty.

Stem-stitch is much used for stalks and outlines, and in Fig. 3, No. 1, you will see exactly how it is done. Each stitch must be exactly opposite the last, not going crookedly one way or another, and yet you should not place your needle where the latter stitch has terminated. Leave a thread or two between.

No. 2 is of French knots, so well known that I doubted whether or no I should give an illustration of them. Twirl your cotton once or twice—in the illustration it is twisted twice—round the needle close to where the thread has come out.

No. 3 is *Point Sablé*. Nothing but one back-stitch! How easy it seems to do it, and yet some people find it difficult because they have not the knack. The stitch, though in a sense a back-stitch, is taken at a slight—very slight angle, so that it forms a round stitch like a grain of sand, hence its name. It is not a true Hungarian stitch, but I have given it here as it is so useful for small work. When you do it, do not bring each stitch under another, but always under, in between those of the last row.

No. 4 is a leaf in the long stitch so much used in this embroidery. It is simply one stitch—nothing more—only if done crookedly, or if it lies too loose, it is very ugly. Equal distances between the bars is needful to secure a good effect; and here the yellow bars should be outlined in the shape of the leaf with stem-stitch in red or blue. In most of the leaves two colours are used, sometimes all three. As a general rule, I have noticed that yellow is the least used of the three colours.

No. 5 is the satin-stitch scallop. Before going further, let me remind you that none of the work is padded.

No. 6 is a leaf; and please note that in the leaves all the stitches lie in an oblique direction. Some people work straight across, but it is not as pretty as slanting stitches.

No. 7 is another leaf with serrated edge. The middle would be thick in blue or yellow, as the needle you see is threaded with red.

No. 8 is another shape of leaf, with thick edge worked in satin-stitch. Bars across the centre.

No. 9 is the buttonhole-stitch scallop. Always work this evenly, and remember never to let any of the material show between the stitches, which should always lie closely together.

No. 10 is a round in stem-stitch. The needle is left in to show how the balls are made, which are so often found in designs for this embroidery.

In Figs. 4 and 5 you will see samples as to how the various shapes can be adapted and worked, and so that you should understand more about the colouring I will say how I have done these.

In *a* is a row of four rounds. The first is a red outline with outer ring of blue French knots. Two long yellow stitches which cross are fastened down by three blue ones. The second is a blue outline in stem-stitch, crossed four times in the same colour with two tiny yellow stitches in the middle to keep them firm. The third is a yellow ray in stem-stitch, with an oval in dark blue; and the fourth is a ring of red stem-stitch, with long yellow stitches taken across once and then crossed again in a reverse direction, and at each crossing is a tiny red stitch.

The oval in *b* has the large side pointed ovals in red. The ones at the tip are blue and yellow together at one end and the same at the other, a blue ball being in the middle.

In *c* is a leaf with thick yellow pointed lobes, the rest in stem-stitch; three blue balls go down the middle.

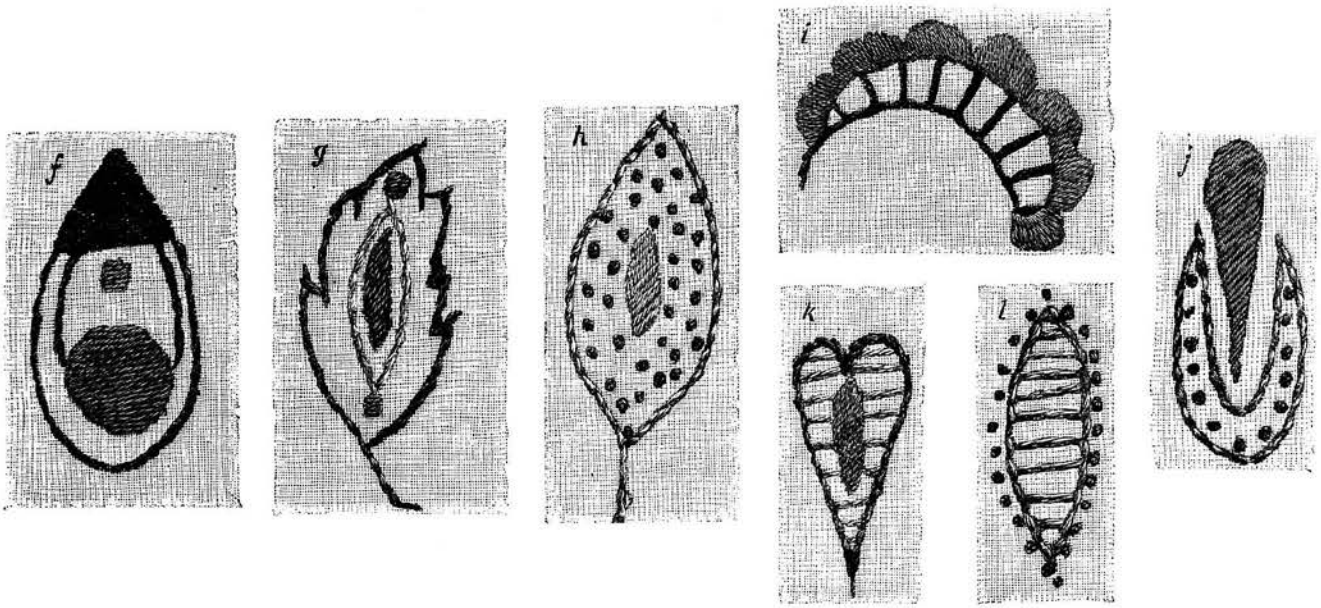


FIG. 5.

The large oval we see in *d* is hardly a leaf. It is a conventional pattern useful in many ways, and in Fig. 1 you will notice it at the corners. Laid down as in *b* and *c*, it would form a very good border for a tea-cloth; and you could vary the way of working it, as well as the arrangement of the colours, at your pleasure. This *d* oval is outlined in yellow—when I use the word outline I always mean stem-stitch—with an inner row of blue *point sablé*. A large satin-stitch oval is in the middle, four yellow balls being at tips and sides, while blue balls are at the two outer ends.

In *f* you will see a leaf very commonly used in Hungarian work. It is partially outlined in blue, and the top is worked in satin-stitch across. Two lines of dark blue reach down to the larger red ball, which has a smaller one above it.

The *g* leaf is serrated and outlined in blue. An outline yellow oval in the middle has a thick inner oval of red, and red balls are at each end of the outline oval.

The *h* leaf is only a yellow outline, with a yellow middle in satin-stitch, the space being filled up with red French knots.

In *i* we see a very pretty fancy leaf, which shows plainly how scalloping can be used. It borders the blue bars, and being red contrasts well with them. Leaves of all shapes can be done in the scallop; but still when there is a curve, as in the leaf before us, it adapts itself better to the scallop.

In *j* is a red leaf, with yellow outline and blue French knots.

The *k* leaf is almost heart-shaped. It is red in outline, and thick middle, while yellow bars go across it.

The *l* leaf is yellow outline, with yellow bars and red French knots outside it.

Enough has been said, and sufficient examples have been given, to show how much variety can be obtained in the work.

In working a bed-spread, if you do not care about having so large a piece of work about, you can cut your linen into squares and embroider these separately. After they are worked you can join them all together, and embroider some fancy stitch over the seams.

Ball-fringe is often used to finish off this work, but tassels made of the same cotton are the prettiest for a border unless you scallop it out.

COINS, OLD AND NEW.

OLD coins are like marginal notes on the page of history. They epitomise an epoch or date a reign. Where manuscripts have been consumed, or monuments have perished, the discovery of buried money has rescued the names of kings and heroes from oblivion, and even enabled us to reconstruct some forgotten chapter in the annals of our race. Coins, therefore, have a value beyond their use as a medium of exchange. They are frequently portraits of reigning princes, registers of events, and symbols of different States.

Like other things in art, their origin is obscure, and they have been developed from crude beginnings to their present perfection of design and form. Barter was probably the first mode of exchange; but in early times something of the nature of coins was used: for instance, shells, pieces of salt, strips of leather, and weights of metal, iron, silver, gold, and so on. The original "shekel" of Scripture was, perhaps, a piece of uninscribed silver weighing so much—the name comes from the Hebrew verb "shakal," to weigh. Ring money in the shape of golden chains, each link detachable and adjusted to a certain weight, so as to serve for money as well as ornament, was common in early times in Europe, and lingered on after true coins had become current. Such were the chains and torques of the Erse and Gaulish chieftains. They were of fine gold, bent into a hoop, with decorated ends, which were pressed together round the neck or waist of the chieftains who wore them. Besides these torques, the ancient Irish had a variety of ring money, which may be described as a loop of gold or silver with disked ends. This is illustrated in Fig. 1. Jewels were also used

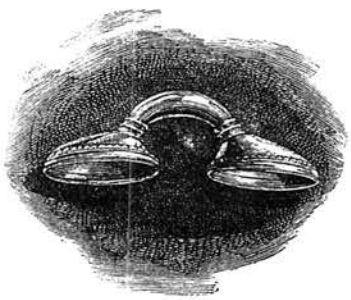


FIG. 1.—IRISH RING MONEY.

FIGS. 2 AND 3.—STATER OF PHILIP OF MACEDON, AND ANCIENT BRITISH IMITATION.

for money in those early ages. Indeed, the term "money" is supposed to come from "manica," a bracelet.

True coins appear to have come into Europe about 800 years before Christ. The Lydians of Asia Minor and the neighbouring Greek colonies made rude coins of gold, which were punched in a die to take in relief some symbolical and sacred figure. Such are the double "stater" (or "standard") of Miletus in Ionia, weighing 248 grains, and stamped on one side with the figure of a lion's head. A similar coin of Sardis, the capital of Lydia, has the figures of a lion and a bull on one side. By-and-by the reverse side of ancient coins showed a concave figure of the symbol; and finally, the reverse side had a separate device. The figures of gods were delineated on the obverse side, and also the heads of deified heroes. After the time of Alexander the Great the heads of living kings were represented on coins; and in the hands

FIG. 4.—COIN OF TASCIOVAN.

of the Greeks the stamped coin took the developed form which it has since retained. The Greeks are supposed to have introduced their coins into Gaul and Britain from their settlement of Massilia (now Marseilles), and it is known that the Greeks carried on a trade in tin with Britain about 300 B.C. and later. A well-known Greek type of coin in those pre-Christian days is the stater of Philip of Macedon (Fig. 2), known as a "Philip." It has a head of Apollo on the obverse side, and a charioteer on the reverse. This coin is interesting as having been imitated by the ancient Britons, as shown by the coin (Fig. 3) where the outlines of the head and horses can be traced. After the Roman conquest of Britain (55 B.C.) the Roman influence was felt in British coinage, the terminations of the names of princes being Roman instead of Greek, as before. Examples of Romanised coins are those of Tasciovanus, and his son Cunobelin. Fig. 4 illustrates a coin of Tasciovan believed to have been coined at Segontium, a city of the Segontiaci of Surrey. Finally, upon the complete subjugation of Britain by the Romans (70 A.D.), the coins of the conquerors became current in place of the native coins. Their gold piece was the "aureus," worth 25 silver "denarii," which corresponds to the "deniers" of France, and became the parent probably

FIG. 5.—ROMAN COIN WITH FIGURE OF BRITANNIA.

of the Anglo-Saxon silver penny. A Roman bronze coin is shown in Fig. 5, and is interesting as having a figure adopted for "Britannia" in the reign of Charles II. On the withdrawal of the Romans (414 A.D.) the Saxons introduced a new coinage, believed to have been a rude imitation of the Lower Empire coins of that date. The principal Saxon coins were the "skeatta," or silver penny ($\frac{1}{25}$ less value than a penny), and the copper "styca." Their design was crude, as will be seen from the example given in Fig. 6, where the Christian emblems of the dove and cross can be distinguished.

The silver "pennies" of the Heptarchy followed, the name coming, perhaps, from the Latin "pendo," to weigh, or "pecunia," cattle. Fig. 7 is a fine example of a silver penny of Offa, King of Mercia (A.D. 757), whose coinage seems to have been superior. Later on English coins were imitated in some parts of the Continent, and the practice continued, the word "sterling" being used for them, from, as is supposed, the custom of examining the coins at Easter by "Esterlings."

The Saxons also introduced the terms "scilling," or shilling, for 5 pence, and "mancus" for 30 pence; but these were at first imaginary coins, representing a sum of money. It was only in the reign of Henry VII. that the shilling came to be a real coin. William the Norman fixed the Saxon shilling at 4 pence, and introduced a Norman shilling whose value

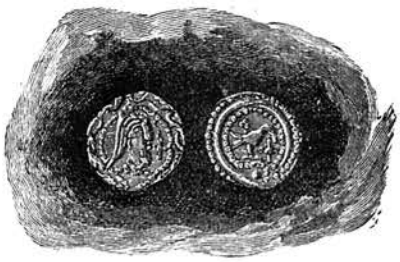


FIG. 6.—SAXON SKEATTA.

was 12 pence. There were other imaginary coins in early Norman times; for instance, the "mark," value 160 pence, and the "pound," referring to a pound weight

FIG. 7.—SILVER PENNY OF OFFA, KING OF MERCIA.

of gold or silver. Under the early Norman kings the Saxon coinage retained its original appearance, more or less; but as time went on, and workers in seals improved their art, especially on the Continent, the Norman coins became more florid and ornate. Fresh coins, such as the groat, the farthing, the halfpenny, as well as gold pieces, were minted. The coins of Edward I. had conventional figures of kings, which continued for eight succeeding reigns. Edward III. assumed the title of King of France on his groats; and the words "Dei Gratia" were also adopted in his reign. He also coined a new gold "florin," the name being derived from a well-known gold coin of "Florence." This coin was, however, soon recalled, and the silver florin we now possess did not appear till long afterwards. The famous gold "nobles" also came out at this time, their original value being 6s. 8d., and the word coming perhaps from their appearance, or the noble metal they were struck from. They bore the legend, "Edward Dei Gra. Rex Anglo. et Franc. D. Hyb." (Dominus Hyberniæ, or "Lord of Ireland"); and the obverse showed a kingly figure with sword and shield, the shield being emblazoned with fleur-de-lys and leopards, while the reverse showed a "ship of state." The "rial" (or royal), so called after the French coin, was in vogue in the time of Edward IV., as also the "angel," which had a figure on the obverse of the archangel Michael piercing a dragon with a spear, and on the reverse a vessel. Henry VII. introduced a gold piece called a "sovereign" (A.D. 1503), or "double rial," the term "sovereign," however, disappearing until revived by the new coinage of George III., in 1817. It represented the king in royal robes, seated; and also bore

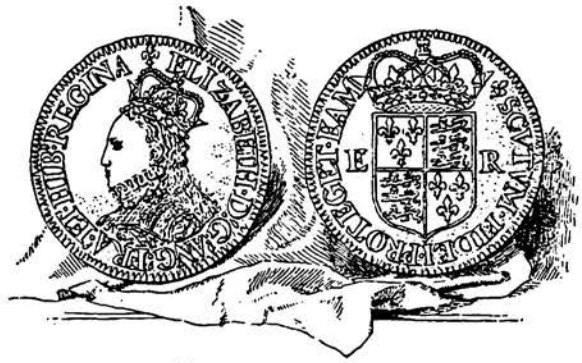


FIG. 8.—SOVEREIGN OF ELIZABETH.

the semblance of a full-blown rose on the reverse, the centre of the rose containing a shield emblazoned with arms. In the reign of Henry VIII. the coinage became much debased, and the king's head on the silver pennies showed the copper mixture so well that his Majesty's loyal but humorous subjects were wont to call him "old Copper-nose." In this reign the pound Troy (so called from the fair of Troyes in France) superseded the older Tower pound in the Mint; and the standard or "crown" gold was settled at its present composition, 22 carats fine gold to 2 carats alloy.

Edward VI. issued crowns and half-crowns of silver, and began to purify the currency: a work which was successfully carried on by Queen Elizabeth, who showed her interest in the work so far as to coin some pieces with her own fair hands, and distribute them as keepsakes. The mill and screw plan of coining now superseded the older stamp, and gave a better finish to the pieces. Elizabeth also introduced a new type of sovereign and its fractions, of which an

FIG. 9.—"MERMAID" TOKEN.

example is given in Fig. 8. She also coined the first colonial money for the use of the East India Company.

Until this time Ireland and Scotland both had coins of their own; the Irish coins being originally of Danish origin, perhaps. A coin of Somerled, a prince of the Hebrides, is said to be extant; as also a coin, or coins, of Malcolm III., a contemporary of William I. But probably few Scottish coins are known prior to the twelfth century. After that we have a truly national Scotch coinage, with pieces bearing the "lion" and the "thistle."

Under James I. of England and VI. of Scotland, the arms of Scotland and Ireland were quartered with those of England and France on English coins. The term "Great Britain" was adopted for the United Kingdom, and on the reverse were the words "Que Deus conjunxit nemo separet."

Charles I. improved the national coinage, both in design and execution. Cromwell discarded the royal arms from English coins, and substituted the simple cross of St. George, with a palm and olive branch, and the legend, "The Commonwealth of England." On the Restoration Charles II. revived the old forms of his father's coinage.

It is impossible within the limits of this article to enter into all the changes and vicissitudes of British coinage, the modifications of design, the new pieces

issued, the symbolism involved, and the occasional debasement of the currency. We may, however, mention the system of "tokens," which appears to have originated in the need felt for a small copper coinage. Fig. 9, for instance, is a token of the celebrated "Mermaid" Tavern in Cheapside, the resort of Shakespeare, and of Elizabeth's reign. The need of small change became so great that Charles II. overcame his prejudice against coining the baser metals, and issued (1672 A.D.) a copper coinage, which was called "servant of money."

George I. was the first to adopt the title "Defender of the Faith" upon our coins, and George III. effected great improvement in them by his new coinage of 1817. The silver crown-piece, with the Greek figure of St. George and the Dragon still on our sovereigns, now appeared, from a design by Pistrucci. The half-crown was produced by Wyon, and the shilling by Wyon, from a design cut in jasper by Pistrucci. The coinage of George III. gave our coins substantially the form they now possess.

Queen Victoria, who began to reign in 1837, issued a series of coins having her bust, executed by Wyon from a wax model of her face taken from the life. The shillings were like those of the preceding reign, with the words "One shilling" between oak and laurel branches. Large £5 pieces were also struck as medals, not for circulation. In 1860 the new bronze

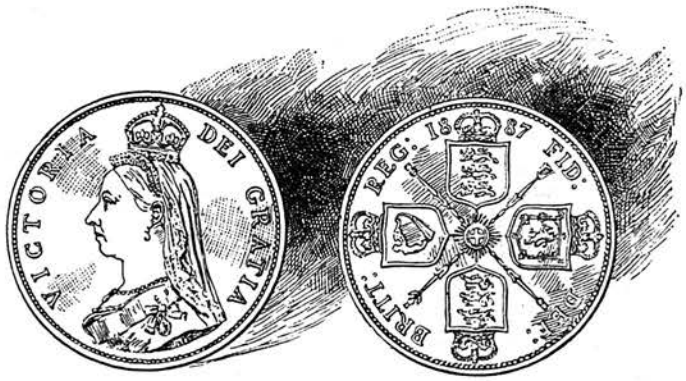
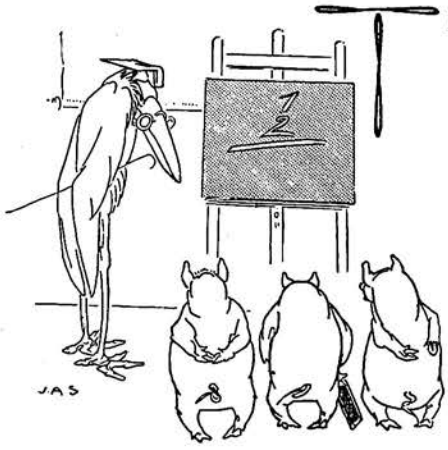


FIG. 10.—THE JUBILEE FLORIN, 1887.

coinage replaced the older and weightier copper pieces. The Jubilee, or fiftieth year of her reign, was, as we all know, signalised by another new coinage in the form of a "double florin," or four-shilling piece, in silver; as well as a £2 and a £5 piece, in gold. The Jubilee florin is shown in Fig. 10.

CAN ANIMALS COUNT?

BY A. H. JAPP, LL.D., F.R.S.E.



WHAT animals up to a certain point can count is undoubted. Sir John Lubbock's experiments with his dogs are proof enough of this. Bisset, the famous animal trainer, brought several animals up to this point, and even found that by patience and skill the pig could be taught one, two, three, etc. Anyone who doubts this must turn to Bisset's own accounts of his experiences with the lower brethren. His success with cats and dogs and monkeys only surpassed in some degree what others had done before him, but it stirs something like incredulity when we read of his success with turtles and goldfishes, and we only recover faith when we find the facts fully attested. "In the course of six months' teaching he made a turtle fetch and carry like a dog, and having chalked the floor and blackened its claws, could direct it to trace out any given name in the company. His confidence even led him to try experiments on a goldfish, not all unsuccessfully. . . . . In the course of twelve months he made a pig—an animal usually supposed to be the most obstinate and perverse in Nature—become most tractable and able to count simple numbers." Bisset was a native of Perth, and having trained many animals and exhibited their performances in Edinburgh, London, Dublin, and other places, died in 1783.

Then Mr. Hamerton gave an account in the first part of his attractive volume—"Chapters on Animals"—of the dogs of a certain Monsieur du Rouil which certainly could count; and more: could read and do such things as completely mystified Mr. Hamerton, as he very frankly confesses. This Monsieur du Rouil died before his training of his dogs was completed, and we have often wondered what became of the

poor dogs, for no one was found equal to carrying their education to a farther point.

"According to Monsieur du Rouil's account," says Mr. Hamerton—"which was probably quite true as far as it went—the dogs were like actors who had not quite thoroughly mastered their parts, and he himself was like the prompter, near the footlights. To begin with, Blanche really knew the letters of the alphabet and the playing-cards by their names, and Lyda really knew all the figures. In addition to this, he said that Blanche had studied about a hundred and fifty words in different languages—something like twenty in each language—words most likely to be called for, such as chick, dog, horse, cat, pferd, canis, etc. The restriction to one set of letters simplified the business considerably, but Monsieur du Rouil confessed quite frankly that she could not get through a word unless he were present. On the other hand, he could not make her spell a word in public that she had not before practised with him in private. So it was with Lyda and the figures. She really knew the figures when isolated, and this had been satisfactorily demonstrated when he left the room, and she gave me the number asked for up to 9. But he would not tell me the secret of the confederacy. I told him what guesses had been made on the subject, but he simply answered that I must have observed how impossible it was for him to make signs with either hands or feet when he moved neither hand nor foot."

"SALLY."

Poor Sally, the chimpanzee at the Zoo, in London, could count clearly up to a dozen at the least, and would bring straws to her keeper to any number under that. And Sally was as wonderful for affection and for sense as for cleverness. She was very fond of her keeper, and when she was dying, found, we do trust, some sense of relief in clasping his hand.

With an accent of the utmost regret, too, the keeper tells of Jack, the ourang-outang at the Zoo, how quickly he was advancing in his training and how docile he had become when he died of that fell plague of those creatures in confinement in our climate—consumption.

Rooks have certainly powers in counting; and so have wood-pigeons, which follow very strict rules of procedure indeed. When feeding in flocks in the fields among the grain or roots, they never forget to post a sentinel or two, and a settled regulated method of interchange of position is kept up. They walk in a compact body, and in order that all may fare alike, the hindmost rank every now and then fly over the heads of their companions to the front, where they keep the best place for a minute or two, till those in the rear take their place in the same manner. They keep up this kind of fair-play during the whole time of feeding.

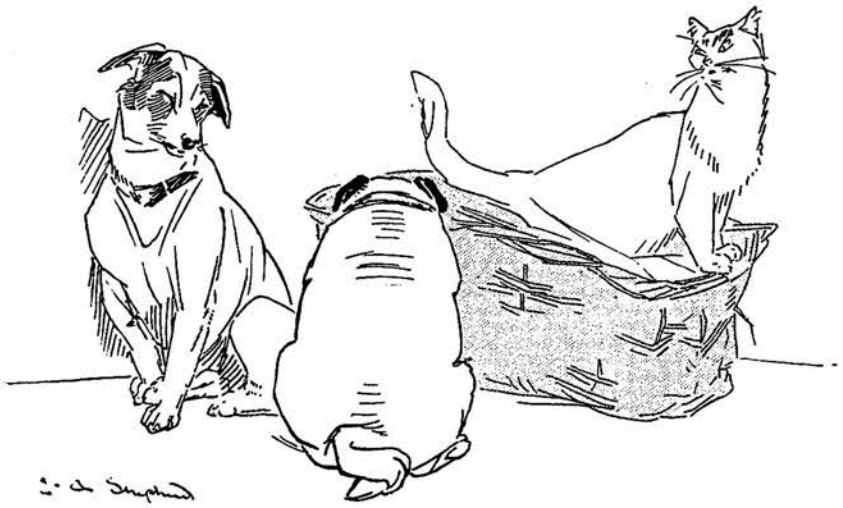
The beaver certainly could not do what he does in the way of architecture and engineering if he could not calculate; nor indeed could the little water-vole, which can run a tunnel right through the dark earth to the exact point it wants: a thing which the cleverest human engineer can only do with the most elaborate helps in the way of levels and instruments of many kinds. Certain species of squirrels must be able to count

"ROOKS HAVE CERTAINLY POWERS IN COUNTING."

—by steps, probably—else they could hardly be able to find, on awakening at intervals in their winter sleep, the little hoard of nuts which they may have laid up against this contingency. The mole could hardly construct the very scientific house he does in the dark, dark earth, with its passages so nicely constructed for getting rid of water, unless he had some simple notion of arithmetic. There can be little doubt that ants can count up to a certain point; and it is almost incredible that spiders can spin their webs without some simple arithmetical knowledge.

Yet some birds, it would seem—and these some of the most intelligent and gifted, as regards song—have no notion of numbers, else it would be hardly possible for the cuckoo to play on them the tricks which it is absolutely certain that he does play with respect to eggs—depositing his own eggs in the nests of other birds. Yet it is hardly possible that *he* can be without knowledge of numbers up to a certain point, for his whole plan circles round a definite way of numbering off the nests in which the female lays the eggs: as No. 1, No. 2, No. 3, and so on. If it is true—as there can now hardly be a doubt—that Mr. and Mrs. Cuckoo not only lay their eggs in other birds' nests, but keep a pretty close watch over these nests by regular turns, to see how their darlings fare—indeed, one very good field ornithologist, who has observed much and closely, gives it as his deliberate opinion that the female cuckoo is ready to aid the young blind monster in getting rid of the true progeny of the foster-parents, and in some cases does herself lift them out of the nest, to her young ones' relief. Of course dogs—clever dogs, at all events—can count, as is proved by the anecdote we have already given of that dog which could carry three-halfpence or more to the baker's shop, and get for them his exact number of rolls, declining to go away till he had had a roll for each copper.

That cats can count was proved by an Essex friend of ours in this way. One of his cats had five kittens, which, as they were very pretty, were promised to various friends; but he resolved to try the memory and arithmetical powers of the cat, so he took away three of the kittens to a different part of the farm-building, where it was impossible the cat could find them. She was greatly troubled, almost distracted at first, licked over the two left, and all the rest of it, but would get up and range about distractedly, mewing and searching, and regarding the dogs (which were well known to her) with some suspicion. My friend brought back one of the lost kittens and put it beside the other two. This was welcomed with an extra share of mewing, crooning, and licking, but in a short while the cat was on the move again, seeking and searching. After a little while another of the kittens was brought back, with precisely the same results, and by-and-by the third, after which pussy was quite content, and did not suddenly get up and go ranging about any more.



"SHE REGARDED THE DOGS WITH SOME SUSPICION."

Another case I know of was almost as conclusive. A litter of three kittens was thrown into the pond. The cat, by the oddest chance, went to the pond while they were still making their half-blind efforts to maintain themselves afloat. Overcoming her dislike to the water, she got out one and laid it on the bank, and then another, and, though she could see nothing of the third—for it had been carried down in the freshet and drowned—she went round the borders of the pond for a good way, looking anxiously. At last she gave up the search in despair, went to the spot where she had left the two, took them one by one to a hole in a garden hedge, where she was allowed to bring them up in a nice little nest of dry leaves; and these two kittens turned out little spitfires, half wild in every respect, and, unlike the other cats, never entering the house unless on a run by stealth, and never becoming completely domesticated, though repeated trial was made to bring them round in this way.

Here is an anecdote attesting the powers of rooks in arithmetic so far, which is so good and clear that

we must give it here in the writer's own words, as no paraphrase or epitome could do justice to it :—

"A very large field had been sown with wheat, and in the centre a little hut had been erected to shelter the boy who had to tend the field, and to enable him to reach all parts of it. A gentleman who wished to obtain a few birds to hang up in his own field thought this would be a good opportunity for procuring them, for they thronged around in great numbers, and kept the boy actively employed to drive them off. So, taking his gun, he went into the hut, accompanied by the boy, and through some holes in the sides prepared to pour a volley on the invaders. But he reckoned without his host. The watchful sentinels seemed instinctively to divine the plot. Their warning caw was loudly uttered, and the presence of the ambushed foe was made known. They circled round and round, and settled in the surrounding fields, but not one of them would trust himself within gunshot of the hut. For some time the gentleman waited in vain, and then sent the boy away, with directions to walk straight out of the field ; but this ruse did not succeed. The rooks still refused to 'come and be killed,' so he left the field and followed the boy ; but no sooner had he gone out of the field than the sentinel gave the signal, and scores of their fellows at once descended and commenced their foray. The sportsman determined not to be outwitted in this way, so he immediately took two persons with him into the hut and resumed his ambush, the rooks having taken flight on his re-appearance. After a short time had elapsed he sent one of the persons away, and after another interval the second, expecting that as soon as they both left the field the rooks would return, but he was again doomed to disappointment. 'Beware !' cawed the sentinels in the most sonorous tones, and none ventured to disregard the warning. Determined still further to test their powers of numeration, he again left the hut, and returned with three persons, all four entering together. Again, one by one, the companions were sent away, and the plan was at last crowned with success. The rooks could count as far as three, but four was beyond their powers, and no sooner had the third person left the field than they hurried to the spoil, but only, alas ! to leave two of their number dead on the field, victims to the want of a knowledge of numeration."—"The Birds of Sherwood Forest," by W. J. Sterland (pp. 135, 6).

Some allowance should, however, in this case have been made for possible confusion arising in the course of the action. Even with very correct-minded human arithmeticians in similar circumstances doubt will often arise, after a lapse of time, whether it is a second or a third that has last been reckoned, and where there is no possibility of clear record at the moment, there is much room for confusion, as anyone will find who will try to keep count of the sacks of coal delivered into the cellar from a cart without the aid of pen or pencil, or anything to make definite mark. We can hardly from this circumstance decide that the rooks' power of numeration absolutely failed at four, though it was conclusively demonstrated that they could not only count, but check and re-check up to three, though, alas ! in this case, as in so many others—there was no possibility of re-trying the case—the single slip was enough to make all retreat impossible.

"NOT ON FRIDAY !"

Some dogs certainly come to know the days of the week—probably count the days as they pass. For example, a friend of mine in the country, who has two farms at a little distance from each other, and regularly goes two days in the week from one to the other to do certain bits of business, and who goes on these days for certain, however often he may go in addition, used regularly to take a setter bitch with him as companion in his walk. But circumstances arose which made him wish to leave her at home on these days, and he would contrive to escape without her ; but invariably she overtook him before he reached his off-farm, bowing and beseeching his favour in such a way that he could not resist her. Finally, he had to make up his mind that she must be locked up next

time, and said so to his wife as Floss lay apparently asleep in the room. But when the day came Floss was not to be found. She had gone off early in the morning, much to the farmer's wonder and anxiety; but what was his surprise to see her waiting for him at the exact spot where she used to overtake him on the road, and on his approach, her efforts to fawn on, and wheedle, and please him were extraordinary, and after this the interdict was removed. Shepherds' dogs, on the asseveration of many shepherds, know Sundays, and in the Highlands of Scotland enjoy their journey to the church as much as their masters.

The famous French theologian and essayist, M. Rénan, who was a great lover of animals, told a number of stories of animals to a contributor to *Truth*, who gave a report of them in that journal in an article headed, "M. Rénan on our Humble Relatives" (issue for July 28th, 1892); and among them was the following :—

"When a child, M. Rénan had for a neighbour a dog that, disliking the Friday dinners of fish and potatoes, used regularly on Thursdays to go looking about for bones, to hide them for his meals next day. How did he know that Thursday preceded Friday? Another dog associated Sunday with personal cleanliness, and used, as regularly as it came round, to go and take a bath, unless the weather was very cold, when he gave himself absolution. His name was Jocko."

And here is a little passage, with some anecdotes, from Mr. Hamerton's "Chapters on Animals" which may well cap these :—"A lady said that she had known a dog that belonged to a celebrated publisher in Paris, who had a country house at Auteuil. Every Friday his family went to Auteuil, and always regularly found the dog there on their arrival. He went alone through Paris, from the Rue de l'Ancienne Comédie, and he never made a mistake about the day. The family frequently went out on other days, but on these occasions the dog stayed contentedly at home. Another dog that she had also known had been bred in a strictly Catholic family, and would never touch meat on a Friday. Bets were made, and the greatest temptations used to overcome his conscientious scruples, but always in vain. He was shut up in a room during a whole Friday, with meat in his reach, but preferred to suffer hunger rather than touch it. One of my friends mentioned a dog that he knew quite well which lost its master three years before from small-pox, and ever since then, in all weathers, paid a daily visit to the cemetery, where it mourns upon his grave. The widow goes to the grave on Sundays after mass. The dog knows this, waits for her at the church door, and accompanies her."

OWNEY, OF THE MAIL-BAGS.

By M. I. Ingersoll.

One raw autumn day, some six years ago, a little puppy crept into the Albany post-office building for warmth and shelter. He was a homeless, hungry little fellow, shivering with the cold, and even to be just inside the door seemed like bliss compared to the street.

Everybody was busy with their own concerns, and nobody saw him. The homeless little dog took courage, and ventured farther and farther into the warmth and comfort. There was a door opened, and he slipped through it. In one corner was a pile of leather mail-bags; he curled himself up among these and went to sleep.

In the morning when the clerks went for the bags they found him there. He could not tell them where he came from; but the wag of his little tail and the pleading look

in his brown eyes said plainly, "Please let me stay!" and they did.

That noon one of the post-office clerks brought in a bottle from his dinner some soup for the puppy, and the next day another kind-hearted man treated him to a piece of steak.

Days went by and nobody came to claim him. Neither did he wander away from his new quarters. He liked his new home, whatever his previous one had been, and meant to stay there. As one and another came in and saw him, they would say:

"Whose dog is that?"

And then the postal-clerks would reply, giving him a playful pat:

"Owney! Owney! who is your owner?"

After a time everybody called him "Owney."

Under good treatment Owney grew very fast, and soon became a very wise and intelligent little terrier. From the first night that he had slept on the mail-bags he had been very fond of them. He often wondered, in his dog way, where they went to when they were tossed on to the wagons and carried off. One day he made up his mind he would go with them and see; so, when the driver jumped on his high seat and drove off, Owney trotted on behind. He saw the bags flung into the car, and when a good chance came, he went in after them. Nobody saw him, nobody missed him; but Owney and the mail-bags were old friends, and he was not afraid to go where they went. By and by, when the men began to overhaul the bags, they found Owney just as he had been found that first day in the office, asleep among them. They were men who knew who Owney was and where he came from, and they took care of him and brought him back on their return trip.

OWNEY IN HIS HARNESS.

But Owney had learned the secret of the

mail-bags. Neither did he dislike the steady jogging of the train and the attention which he received. Soon after he took another trip. This time he was gone for several weeks, and his friends at Albany thought they had seen the last of him; but one morning he walked in looking a little thinner, a little more ragged, but very wise and happy. Though glad to be at home again, he had evidently enjoyed his trip very much. Where he had been, of course, was only conjecture, but it was thought he must have been a long distance. His friends, afraid that he might go upon another journey and perhaps be lost, took up a subscription and bought him a collar. This collar was marked:

"Owney,"
Albany Post-Office,
Albany,
N. Y.

To this collar was fastened a card asking the railroad postal-clerks to fasten tags to him showing where he had been, in case they should encounter him traveling about.

It was not a great while after this that Owney was gone again. His way of traveling was to jump aboard the first mail-car he met, and when that reached its destination and was emptied, he would take any other that was standing in the station ready to leave. If he ever got tired and wanted to go home nobody knew it; and as he could not ask questions as to the way, the only thing for him to do was to keep on going.

He went to all kinds of places and met all kinds of dogs. Some days a generous postal-clerk would give him a good dinner, the next day he would have none, but it was all the same to Owney so long as he had the excitement and change.

He went to Chicago, Cincinnati, and St. Louis, and they attached checks to his collar. Then he went on through Salt Lake City to California, and from there to Mexico. In Mexico they hung a Mexican dollar on his neck. From there he came up through the South, finally reaching Washington. His collar was hanging full of tags and checks, and poor Owney was weary of the heavy load about his neck. Postmaster-General Wanamaker saw him and took pity on him. He carried him out one day, and had a harness made for him; then he took the badges from his collar and fastened them to his harness, as you see in the picture. If you look closely you will discover the Mexican dollar, and also a King's Daughter's badge which someone presented to him.

Owney did not tarry long in Washington, but was soon off again with his new harness. The farther he went the more checks he had to carry, and the heavier grew his load. At last the attachments alone weighed over two pounds, and poor Owney was tired of carrying the dangling things about with him.

A Boston postal-clerk saw him and took pity on him as Mr. Wanamaker had done; he carried him home to his house, and wrote a letter to the postmaster at Albany, telling him of the dog's difficulties. Word came back to take off the harness just as it was, and forward it to them. This was done, and the harness with its attachments can be seen any time in the post-office building at Albany, preserved in a glass case with Owney's picture.

Once in his travels Owney reached Montreal, and, happening to follow the mail-bags to the post-office, he was taken possession of and locked up, while a letter was sent to Albany telling the officials there of his whereabouts. A reply came to let him go and he would take care of himself. This the Canadian postmaster refused to do till the cost of feeding and keeping him was paid, in all amounting to two dollars and fifty cents. A collection was called for among his old friends, the money forwarded and Owney released.

Everybody in the postal-service in the United States knows him, and perhaps the next time he visits Canada he will not be a stranger.

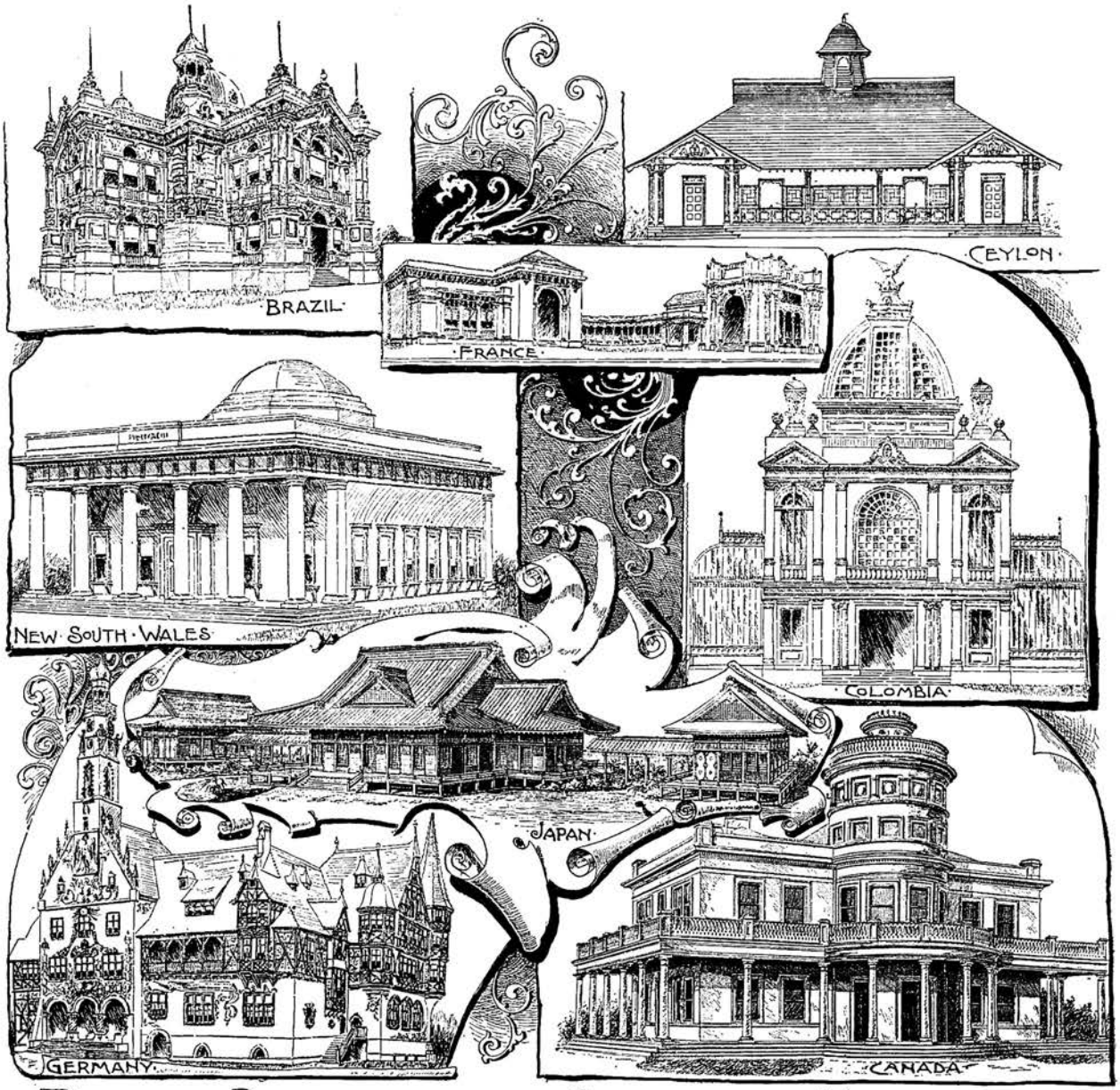
Owney is a cross between an Irish and a Scotch terrier. His fur is short, gray, and curly. He has beautiful, intelligent brown eyes, but somewhere in his wanderings has lost the sight of the right one, probably from a hot cinder.

When he wore his harness and railroad decorations, he was a dog of most unusual appearance; but he gave up the straps and medals some two years ago, and now there is nothing

to distinguish him from any other gray mongrel cur. I had heard about Owney from a friend who in his travels had met the dog; but last summer, while out camping, I became acquainted with him. One of our party was a post-office railroad clerk, and on the day he started for our camp Owney appeared in his postal-car. My friend managed to lure the dog to our camping-ground. Owney seemed pleased at first with the broad fields, and enjoyed now and then a dip in the sea. But two days and two nights were enough for him. On the morning of the second day he disappeared.

At half-past six in the morning Owney was still in our camp; but at half-past eight he was reported in the Old Colony station in Boston. He must have caught the first boat for the city, and made straight for the railway station.

Where he is now, I don't know; and if I knew *to-day*, he might be half-way to California a few days later. His home is with the mail-bags; and nothing would induce him to ride in a passenger-car. But no accident has ever yet happened to a train when Owney has been aboard, and the railroad postal men are beginning to look upon him as a "mascot."



Demorest, 1893

FOREIGN BUILDINGS AT THE COLUMBIAN EXPOSITION

A GOSSIP ABOUT SHELLS.

PEOPLE who have not given a thought to the origin of their shirt-buttons may be surprised to learn that for the production of those useful articles and many others there are imported into this country every year over 2,000 tons of mother-of-pearl shells. Few of the molluscs which frequent the coasts of Britain have shells remarkable for either beauty of form or of colour, and contribute little material of use in the arts. The oyster furnishes a delicious article of food, but its shells are of so little value that they are usually cast aside as rubbish ; of the whelk, the winkle, and the cockle, so highly esteemed by the plebeian, the same may be said. Mussel-shells, however, admit of being applied to useful and ornamental purposes. Their external surface is ground down until the pearly material is reached, and thus prepared they are fashioned into scent-bottles, pin-cushions, ring-trays, and other articles of that kind, in which they show to considerable advantage. The scallop-shell, which is not improved by polishing, but looks well when tinted and varnished, is used for somewhat similar purposes.

Of smaller varieties of British shells, imitation flowers are made, and boxes decorated with them form a staple article of the fancy goods dealer. Calcined and ground shells are used to some extent in the manufacture of pottery, and on various parts of the coast shells are crushed and applied to the land as manure, the fact that they are chiefly composed of carbonate of lime accounting for their application to the latter purpose.

Early voyagers to Southern and Eastern seas brought back with them specimens of shells unknown on our shores, and articles of utility and ornament were made of them, which excited much interest. The South Sea Islander found in the shells which strewed the beach materials for making his fish-hooks, spear-heads, drinking vessels, knives, and articles of personal adornment, and it was surprising to find how well he had turned them to account. In every museum is now to be found a more or less complete collection of articles of the kind referred to, and all bear testimony to the exercise of much skill and patience. It was the necessity of the inhabitants of the distant isles of the sea that pointed out to more favoured peoples how to convert shells to useful purposes ; but it was not until a comparatively recent time that the lesson was taken advantage of.

Shells from foreign parts, whether polished or in their natural state, have long been used as ornaments or treasured as curiosities in most households in this country ; but it was not until the Birmingham button-makers and Sheffield cutlers began to use them in their trades that the traffic in them assumed any dimensions. Mother-or-pearl was found to be admirably suited for making buttons, knife-handles, and buckles, and also for decorating articles by the inlaying process, and now the trade in that material has developed into considerable importance. The mother-of-pearl shells are obtained chiefly from Australia, Manilla, Bombay, Egypt, South America, and Tahiti. Those from the two first-named places are the most esteemed. Many of them are as large as dessert-plates, remarkably free from flaws, and of exquisite beauty. They are about half an inch in thickness, and weigh on the average from eighteen to twenty ounces each. A ton of picked samples is worth about £300. The South Sea variety used not to be esteemed of much value, as a large portion of each shell was dark-coloured. For years the dark portion was cast aside as waste ; but the insatiable demand for novelty in buttons induced some of the Birmingham makers to utilise the dark parts of the shell, and under the name of "smoked pearl" it became popular, and continues to be so till this day. Buttons of mother-of-pearl are made of all sizes from two inches in diameter to three-sixteenths of an inch, the former being used for coachmen's overall coats, and the latter for ladies' gloves and ornamental purposes. In making buttons the shell is cut into discs or lozenges of various sizes so as to utilise the largest amount of each. The cutting is done by means of annular saws, and usually the discs are so thick as to admit of being split up into two or three pieces, each of which furnishes material for a button. The pieces are turned and bored separately. The surfaces of buttons, studs, &c., are sometimes beautifully carved or etched.

In the manufacture of papier-mâché goods, thin pieces of mother-of-pearl are introduced with fine effect, and the same material is now extensively used in ornamenting card-cases, purses, jewel caskets, and an infinite variety of other articles. The best effects in this application of mother-of-pearl are obtained by using the shell of the various species of *Haliotis*, or ear-shell. Their variegated colours and wrinkled structure give them when polished an exceedingly rich appearance. The *Turbo olearis*, or green snail, is also employed with excellent results.

At Jerusalem there is a considerable trade in carving and engraving mother-of-pearl shells, which are sold to visitors as *souvenirs*. These are known as "pilgrim shells," and the subjects illustrated upon them have, as a rule, relation to incidents in the life of Christ. The Chinese carve quaint devices in the same material. In various parts of the East, the larger mother-of-pearl shells are used in the construction of houses. Mounted in a framing of wood they make at once strong and elegant panels, shutters, &c. The cathedral, and other sacred edifices at Panama are lined with shells, and the soft light they diffuse is said to have a most pleasing effect.

Several species of cowries are turned to account for purposes of personal adornment in the shape of neck-

laces, bracelets, belts, &c. In the Friendly Islands, a yellow cowry is the badge of chieftainship. The harness of elephants in some parts of India is enriched with rows of small and highly polished cowries. One variety is used in West Africa and some other parts as money ; but the medium is a clumsy one, as may be guessed when it is stated that it takes 1,500 cowries to equal the value of one English shilling. The "tiger cowry," one of the largest and most beautiful of this family, is to be seen converted to use in the form of salt-cellars, ring-dishes, snuff-boxes, pin-cushions, &c. Some are engraved in cameo style with mottoes, texts, or the Lord's Prayer. This shell is a favourite cabinet ornament, being as a rule beautifully coloured and having a high polish.

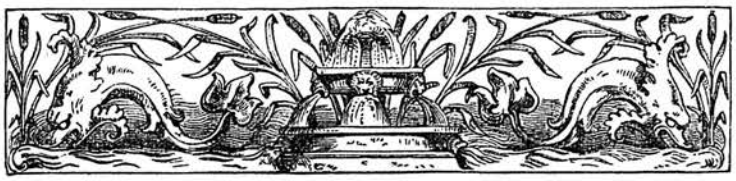
In different parts of the world trumpets fashioned from shells are in use by herdsmen for calling their cattle. The labourers on West Indian plantations are summoned to and from work by an instrument of this kind, and in some parts of Wales call-shells have long been employed. The lamps used in Indian temples are frequently made of shells. The Dyaks of Borneo expend much labour upon carving from the huge shell of the *Tridacna gigas*, or "Dutchman's cockle," armlets of great beauty. In texture these ornaments resemble ivory, but retain their original pure white colour untarnished by time. Amongst other uses to which this, the largest shell known, is put, may be mentioned its employment as a basin for garden fountains, as a dish for holy water in Roman Catholic churches, and as a vase for flowers. A more ready way of forming shell bracelets than that referred to above is practised by the natives of Dacca. They select the strong and heavy chank-shell (*Turbinella pyrum*) and by sawing it across at particular points get out rings of shell that require only a little polishing to fit them for use. This shell is also employed as a burnisher for native-made calico and paper. The process is a laborious one, but the results are highly satisfactory.

The natives of the Bahamas are famous for their imitations of flowers in shells, and some splendid specimens of their work are to be seen at Bethnal Green Museum. The baskets of flowers, head ornaments, &c., are marvellous examples of imitative art in a refractory medium. The roses, passion-flowers, and others are perfectly copied, and the delicacy of the whole composition is charming.

Everybody is familiar with shell cameos. The art of cameo-cutting is of high antiquity, and was brought to great perfection by the Greeks. Until modern times, however, the only materials used by the artists were different kinds of precious stones, but chiefly the variegated onyx. About the year 1805 the art of making shell cameos was introduced into Rome, having been conveyed from Sicily, where it is believed to have originated. Forty years ago, it found its way to Paris, where it has been carried on to a greater or less extent ever since. Now the finest shell cameos are produced at Rome and Genoa, those made in France being designed for a cheaper market. There are four varieties of shells used for cameos, namely: the Bull's Mouth (*Cassis rufa*), the under layer of which is red, resembling the sardonyx; the Black Helmet (*Cassis Madagascarensis*), the ground of which is a dark onyx; the Horned Helmet (*Cassis cornutum*), which has a yellow ground; and the Queen's Conch (*Strombus gigas*), the ground of which is of a pinkish hue. For cameo-cutting it is necessary that the shells should have three layers or strata of different-coloured material: the lower to form the ground, the middle for the figure, and the upper to mark the hair, wreath, or other prominent part. Having selected and cut out a portion of shell suitable for his purpose, the artist fixes it with cement on a piece of wood of convenient size and shape for holding in one hand. He then sketches with a pencil an outline of the design. All the substance of the shell outside this is removed by scraping or filing till the ground layer is reached; then by the careful use of a series of delicate tools the work is completed. Many of the French cameos are sent to Birmingham to be mounted. At present shell cameos are not in much demand in this country, but purchasers for them are found in the colonies and the United States.

In concluding this paper, it must not be supposed that we have exhausted the subject by any means. The uses of shells beyond those that have been enumerated are many and interesting. Let those who would be further instructed in the subject visit the British and the South Kensington Museums, and they will find abundance to gratify the appetite we have but whetted; or if they would know what an important business the traffic in shells has become, let them attend one of the sales of those articles held periodically in London.

DAVID BREMNER.



A CHAPTER ABOUT SOAP.

BY CINDERELLA.

HEN was soap invented? And how did people keep themselves clean before that time? are two questions often asked; and we propose in the present article to furnish answers to them, and supply information on a subject which is the more interesting as it is closely connected with comfort, health, and decency.

The earliest mention we have of soap occurs in the works of well-known Greek and Roman writers. When Rome spread her power over distant lands, she learned the arts of the people she conquered, and thus it became known that the Germans and Gauls made use of a substance in washing, which in their old language was called *seip*. The Romans named it *sapo*, and our word is *soap*. The writers who mention it describe it as made of goat's fat and ashes mixed together by heat; and there were two kinds, as at present, hard and soft, and also varieties of these kinds, some of which became fashionable at Rome, and were used by the upper classes for dressing their hair as well as washing. Among these sorts, which probably resembled pomatum, there was one known as Batavian froth. We may therefore conclude that soap was invented by the people called barbarians about two thousand years ago.

Before that time, certain natural productions were used in washing; but with them the cleansing of linen or woolen cloth must have been a work of considerable labor, and less perfect than with manufactured soap. In the earliest times the custom was, as it still is among savage tribes, to stamp on the things to be washed, and tread them under foot in water. Homer alludes to this way of washing. Sometimes a lye was made by pouring water on wood ashes; and this was used to cleanse other things — wine-vessels, and images of the gods in the temple, as well as clothes. Egyptian nitre was also used dissolved in water; it is believed that this is the same substance as that mentioned in the Hebrew Scriptures, under the name of *corith*. From Jeremiah's expression, "Though thou wash thee with nitre, and take thee much soap," we are led to believe that even in those early days two sorts of materials for washing were known to the Jews. In some countries, too, there were alkaline springs flowing from the ground; and in the water of these, clothes could be cleansed without soap. The people still make use of them in different parts of Europe. Ox-gall was largely employed, and, perhaps more than all, urine. So much value was set upon the latter in Rome, that vessels were placed at the corners of streets to collect it, and carried away when filled, by the scourers, who, in consequence of the unpleasant smell attending their trade, were made to live in a remote quarter of the city. A somewhat similar practice prevails in China at the present day. It was one that prevented defilement of the walls and public thoroughfares, at the same time that it turned to profit what would otherwise have been a nuisance The Emperor Vespasian laid a tax upon the article, levied probably, on those who benefited by the traffic in it. It is still used in some towns of the north of England, where a few years ago servants in private houses were accustomed to sell it to collectors.

Besides these materials, there are several kinds of meal which have cleansing properties, such as oats, barley, and beans. Bran, too, and rice-water, can be used with delicate articles liable to lose their color, and too weak to bear much rubbing. Meal is still employed in dressing certain sorts of woolens, and, as is believed, was similarly employed in past ages, and fuller's earth was much more largely used then than now.

There is also reason to believe that the ancients made use of the juice of the *saponaria officinalis*, or soapwort (bruisewort), a plant found in England, and in most European countries. It grows about eighteen inches high, near hedges and thickets, on a round stem, which, as well as the leaves, is very smooth. The flowers are a pale blush-color, with an oppressive scent, and bloom in August and September. Some double sorts are cultivated in gardens. The sap of this plant forms a lather in water; the leaves serve as soap when rubbed, and will remove spots of grease from cloth. At one time it was applied as a remedy against some kinds of skin disease. A plant similar in nature to this is much used by the peasantry in Spain and Portugal.

Another vegetable production is the fruit of the sapindus, as it is called, a sort of name for *sapo indicus*, a tree that grows in the East and West Indies. The fruit is pulpy, about the size of a cherry, but it requires to be mingled with a good quantity of water, as it is of a very caustic or burning nature. People who use it occasionally in the backwoods of America, if not careful, sometimes find their clothes spoiled by it. This pulp, when thrown into ponds or rivers, will intoxicate the fish. The seeds or nuts were at one time brought to England, and used as waistcoat and gaiter buttons; when tipped with metal they were very durable.

It was at the beginning of the sixteenth century, about 1525, that soap was first made in England; before that time it had been imported from foreign countries. The price was for one sort two cents per pound; for the commoner, one cent. There is reason to know that the Romans had become manufacturers at an early period; for among other remains of that people discovered at Pompeii was a soap manufactory, with a quantity of soap still perfect, although it had been buried seventeen hundred years. The process of making was not very different from that which now prevails; and which, after this short sketch of the history of soap, we next proceed to describe.

The manufacture of soap is one of considerable importance as regards trade as well as health and cleanliness; and the use of it is one of the evidences of civilization. There are five or six kinds made in this country which may be considered as staple articles, besides numerous varieties. It is well known that grease or fat will not mix with water unless something else is combined with it. This something else is called an alkali, and by the mixture of fat and alkali soap is produced. There are different kinds of alkalis, two of which are used in soap-making: potash and soda. Certain plants contain soda; in some parts of the world, Hungary and Egypt, it exists in the earth; in Spain great quantities were once made by burning seaweed, and exported as *barilla*, and in Scotland also, where it was called *kelp*. But these were all more or less impure, and are now seldom used, because a better and cheaper sort is made from common salt. Since the duty on

this article was taken off in 1825, a very pure kind of carbonate of soda is obtained from it; and one advantage attending its use is that the smell of waste lees at soap-houses is less offensive than formerly.

Carbonate of soda contains carbonic acid; this is removed by mixing it with lime, water is then poured over to form a lye, and this is afterward carried into the large copper or boiler provided for the purpose at soap manufactories. With the lye a quantity of tallow is put into the boiler, from ten to fifteen hundredweight of the one, and from 200 to 300 gallons of the other, which, on the average, will give a ton of soap. The whole is boiled together for about four hours, by which time it is generally found that a combination has taken place, and the fat is converted into soap. The fire is withdrawn, and time given to cool; the lye is run off or pumped out, and fresh lye added, followed by another boiling, and so on, three or four times, a little common salt being thrown in toward the last, to assist the separation of the soap. The fire is then put out, the melted material left to stand a short time, after which it is carried in large ladles or buckets and poured into the frames, which may be compared to a sort of wooden well from three to four feet long, fifteen inches wide, and ten or twelve feet high. Some of them will hold several thousand pounds' weight. In these the soap remains two or more days, until it is hard and solid, when the wooden frames are lifted off, the mass is cut into slices about three inches thick with wires, and these, being cut across, form the bars such as are sold in the shops. After being cut in this way, they are piled up in stacks for further drying.

Such is a general description of the method of making soap, and in the main it applies to all kinds; the variations are chiefly in the materials. To make the best white curd soap, none but the best and purest tallow is used, and sometimes olive oil. Mottled soap is made of coarser kinds of tallow and kitchen stuff; and the mottled veins are produced by having very strong lye poured over and stirred into it, just before it is taken out of the copper. Different colors may be given in this way. Yellow soap requires a different mixture; tallow, with a considerable quantity of resin broken small, and a small quantity of palm oil. The best yellow soap should not contain more than one-fourth part of resin, and when cut it will have a bright, waxy appearance, produced mostly by the palm oil. It makes a better lather than mottled soap. If, however, there is too much resin and too little tallow, it is bad, irritating to the skin, and especially injurious to woolens which may be washed with it. Buyers of the article should always remember that low-priced soap is never cheap; the most stinking fat is generally melted up with the resin to make yellow soap; and the commoner it is in quality, the more water does it contain; so that those who buy cheap and bad soap pay at the rate of eight or ten cents a pound for the water inside of it. Dishonest manufacturers will sometimes increase their quantity of soap by throwing dead pigs into the boiler with the fat, and make the lye so strong as to dissolve all but the bones. No one who has smelt the offensive odor of bad soap can believe that it is made of good materials.

The best Windsor soap is made of about nine parts tallow to one of olive oil and soda lye. The scents or perfumes are always added during the melting. Lard is used for some kinds of toilet soaps; they are very white and smooth, and frequently preferred for shaving. There is a great variety of soaps of this class, with names, colors, and scents to please all the fancies of customers. Some of them are made with olive oil; and others are improved in appearance by being pounded in a mortar after the first process of making, and made up a second time.

Soft soap is made with potash lye and oil. Soda is the alkali always used for hard soap; potash for soft soap. In this the lees are not separated after boiling, as with the other; and it is said that the making requires greater care, and is more difficult. Two hundred pounds of oil, seventy-two pounds of potash, and the lye will produce nearly five hundred pounds of soap. The rankest sort of oil is generally used, and the fig-like appearance of soft soap is caused by a small quantity of tallow being mixed with it, and forming into small grains during the boiling. For the best sorts pure oils are used; among them are poppy, linseed, cocoa-nut, almond, and olive oils.

There are also medicinal soaps; some combined with mercury or other metals. One is made with olive oil and oxide of lead; the result is dischylon, so much known and used as plaster. Emulsions and liniments are species of liquefied soap formed by mixing hartshorn, potash, soda, or lime-water with oil; they present a milky appearance. A mixture of oil and lime-water is a good remedy for burns. At some of the large iron-works a supply is always kept in readiness against the accidents which so frequently occur.

Spanish or Castile soap is made from soda and the best olive oil, mottled by the addition of oxide of sulphate of iron. The purest kind is used for pills; their effect is slightly aperient and corrective of acidity of the stomach, and, combined with carbonate of soda, they are sometimes prescribed in gout and affections of the bladder. In some forms, too, Castile soap is an antidote to certain kinds of poisons. But when used as a curative, especial pains should be taken to have it pure. The wickedest of all adulterations are those of medicinal substances.

Soft soap, when made of pure materials, potash, and olive oil, is also valuable for medicinal purposes: some kinds of skin disease, scab, and ringworm may be much better cured by it than by the greasy ointments so often used. The latter not unfrequently aggravate the disease by creating dirt, while soft soap tends to cleanliness. Sulphur is occasionally mixed with it to assist its curative effect; but this should only be done under the advice of a medical practitioner.

The most harmless adulterations which are practised in the manufacture of soap are the mixing of certain kinds of earth or clay and potato-starch with the fat.

CAN AND WON'T.—Mark Twain says: "I am different from Washington; I have a higher and grander standard of principle. Washington could not lie. I can lie, but I won't."

CHOOSING A PROFESSION.—A lady of birth, and leader of fashion, ay, and of intellect too, had three sons. The fond mother, anxious to "teach the young idea," gathered these precious nestlings round her on the sofa one holiday, and explained that her fortune was small, and died with her, and that these three noble boys of hers would have to undertake noble work; in fact, they would have to go out into the world as their father had done, and win their way. "Yes, mamma, yes," cried the earnest little fellows, fully comprehending the mother's plan. Her eyes glistened as she listened to their willing goodness. Visions of one as a general, another as a judge, a third as a bishop, swam before her. "Well, my darlings," she said, "you are good boys to be so willing to work. What would you like to be?" The young voices, without a pause, without a moment's hesitation, full of Claude Duval and Sylvanus Cobb, cried out with one accord—"Highwaymen, mamma!"

A HOME FOR STRAY BOTTLES.

By William Owler.

VERY interesting question is "What becomes of bottles that have once contained 'fizzing drinks,' commonly known as temperance beverages?" The early Church started the temperance movement in England in 596, and King Edgar in 960 attempted to make his subjects teetotalers by Act of Parliament. Subsequent Acts have been inscribed on the Statute-book to induce the common people to live soberly, but all to no purpose. One knight of St. Crispin decided he would not spend his holiday abroad, and therefore he invited to his home all his friends, with whom he made merry, and dispensed with lavish hand brandy and soda. And what an *omnium gatherum* of refuse bottles were collected in that cellar! Yet it was nothing compared to the marvellous sight we beheld in the old workshop of a gas engineer in Southwark. As we gazed in amazement at the sign of "The Bottle Exchange" we ventured to engage the attention of a mild-mannered man who was checking an inward entry of bottles, which were afterwards "sorted" and placed in boxes for removal to their original owners. All "the lost, stolen or strayed" mineral water bottles find a home in the racks at Holland Street, and here their flight is arrested for the purpose of being returned, sold, or destroyed. The Bottle Exchange confines its operations to bottles which have contained lemonade, ginger beer, soda or seltzer water, and here the line is drawn. No "black beetles" come within the four walls of the Exchange, and to have beer bottles in the racks would offend the tender consciences of temperance advocates. Beer bottles seldom go astray or wander from "the house of call." And the reason is obvious. Beer-drinkers have to pay full value for the loan of the bottles; buyers of mineral waters pay a nominal deposit. The manufacturers and bottlers, however, pay 1¼*d.* for each bottle, and, although charging for the contents, yet no fee was originally made for the bottle. This occasioned great loss to the mineral water manufacturers, and the object the Bottle Exchange has in view is to restore the bottles to the owners. The retail dealers were under no obligation to return them. The customers laid them aside as soon as done with; and consequently thousands of mineral water bottles have been recovered from dustbins and underground cellars, or purchased from marine-store dealers, who formerly sold them to rival traders.

All this has been changed since the Bottle Exchange opened its doors. The depôts extend from Chatham to Oxford, and from Northampton to Brighton. The members number over 300, and there are 10 branches within a radius of 100 miles. The bottles in the collection come from India and all parts of the world; and we saw 50 gross ready to return to the East. Many of these bottles arrive in London in ships, and the Exchange pay the men who deliver them at the "home." The origin of this novel scheme was to protect bottle-owners in the mineral water trade; and over ten years ago the Mineral Water Bottle Exchange and Trade Protection Society was founded, with Mr. Walter Davenport as secretary. The members comprise nearly all the manufacturers within 100 miles of the metropolis, and the society is managed by a council of delegates chosen by the members of the various districts covered by its operations. Formerly thousands of pounds were lost in bottles, and some manufacturers were ruined. The public looked upon the bottles as of no value, the retailer was equally careless, and in many cases

other people's bottles were frequently used. To remedy the evil the name of manufacturers was blown on the glass, but that only made it useless to a rival, and it was not sent back to its rightful owner. Hence the idea of an Exchange and Trade Protection Society in which the members agreed to put an end to the fraudulent system which had hitherto prevailed. The members were pledged to forward the bottles of rival traders to the depôts which were opened in different parts of the metropolis in order that they might be returned. Co-operation was necessary to make the operations of the society successful. Inspectors were appointed to see that one manufacturer did not use the bottles belonging to his neighbour, and lost and stray empties were forwarded to the depôts by marine-store dealers and others. Arrangements were also made with vestries and dust contractors to forward to the Exchange all the bottles which came in their way; and now this novel Exchange is an active company of traders under the Trade Marks Act. A small charge is made to members receiving back bottles, but non-members pay a higher scale. Seven years ago certain engineering works were leased, and the London depôts centralised in Ridler Place, Holland Street, Southwark. A dozen other societies were formed in the United Kingdom, which are affiliated with the Bottle Exchange, so that the bottles of mineral water makers are now protected and find their way back to the place of origin.

From a photo by] [*A. B. Hughes.*

MAIN ROOM OF THE BOTTLE EXCHANGE.

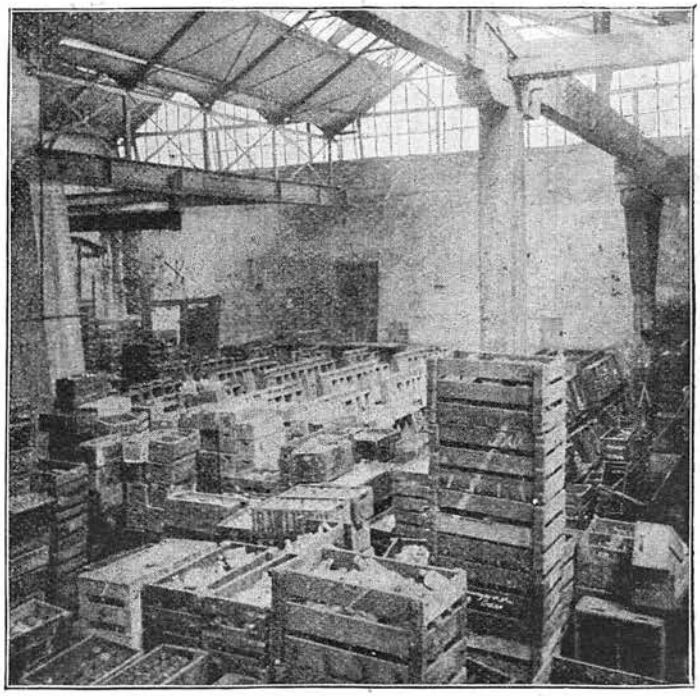
Having indicated the scope of the scheme we shall now attempt to depict this unique Exchange. The building is situated in a by-way, and is well adapted for the purpose of a bottle store. Passing under the gateway, there are piles of boxes of empty bottles in rows, tier above tier. Thousands of these boxes are also in position, and the storage capacity is immense. At the time of our visit there were about 3000 gross of bottles in the Exchange. The boxes of small dealers are placed in racks, and when full the owners are advised and they send for their property. A large portion of the well-lighted building is devoted to "sorting" members' bottles. The names are inscribed on racks on the slant in which boxes are placed. About twenty names appear in each row, and these are bewildering in their number. Indeed the sorting is carried on by boys on similar lines to those in operation at the General Post Office. When a member's crate is full it is removed to the stores, but the large manufacturers generally claim the bottles once a week. Consignments arrive daily, and van loads leave the Exchange hourly. A small sum is allowed per dozen by the society for cartage and collection on bottles sent in by marine-store dealers and dust contractors, but no allowance is given dealers or manufacturers.

Very little escapes the eagle eye of the dust collector, and hence one part of the Exchange is devoted to bottles recovered from dust-bins, where consequently the odour is not of Rimmel. But with plenty of clean water and bottle-washing machinery the most offensive-looking bottles are made sweet and clean. In fact the majority of lost or stray bottles are recovered from dust-bins, and from this source alone 87,563 dozen were returned in 1895. These dust collectors get 2*d.* per dozen for carting the bottles to the Exchange. They carefully search the heaps before being consigned to the destructors; and the major portion of London dust is "dumped" at Sittingbourne and other favourite haunts. Contractors and searchers are in the pay of this novel Exchange, and

not a bottle is discovered that does not find its way to Southwark. The number collected from dust-yards and marine-store dealers in 1889 amounted to the total of 113,016 dozen; during 1894 the quantity recovered from these sources amounted to 200,237 dozen. But the total number of bottles "turned over" at the Bottle Exchange during 1894 was upwards of 9,840,000, whilst in addition there were 33,000 boxes, 13,000 siphons, and 585 casks claimed by their owners. The total number of bottles "exchanged" in London and provinces in 1895 was—bottles in dozens, 445,751; boxes, single, 31,760; siphons, 16,112; and casks, 698.

The right to use bottles or siphons bearing certain marks is frequently purchased by new firms, and the attention of the trade directed thereto. Indeed stringent measures are adopted to protect these legal purchases as if the bottles bore the name or mark of the present owners.

Fashion and shape in bottles have considerably changed, and so have the stoppers. In the council room Mr. Davenport has a cabinet full of bottles, and each one has a history. The early form was egg-shape, in stone, and one we saw was nearly 150 years old. The collection is most interesting, and the variety of bottles in shape, style, and material is a notable feature in this home of old bottles. Fortunes have been lost in developing patent corks, screws, and stoppers, and fortunes have been made by the owners of the popular devices now in common use. Strange as it may appear, the capital employed in the mineral water trade in England is £30,000,000, and the people engaged in this industry number over half a million.



From a photo by] [*A. B. Hughes.*

A CORNER IN THE BOTTLE EXCHANGE.

THE GIRLS OF TO-DAY.

By ONE OF THEM.

DURING the last few years it has been the fashion for people of all sorts and conditions to busy themselves about us and our position; they have given their opinions of us very freely, they have discussed our capabilities, or rather incapabilities, together with our future prospects very much as though we were marionettes, without souls or brains or hands.

We have looked in vain among these opinions for some practical benefit to be derived from a study of them, but what we have noted is a sort of compassion for us that we should have been born into the world at all, and that our being here is a cruelty to our brothers and fathers; for if we are stupid, they must keep us, and if we are clever, we rob them of their situations, and must keep them; but that which hurts us most is the opinion that we are useless lumber in the dear old homes.

We beg to differ on every point: in the first place, we join heartily in the General Thanksgiving, and thank God for our creation and preservation as for great blessings, and this we do every day of our lives. And in the dear homes, however poor they be, we feel and know we have definite places, and that when we leave them, it will mean sorrow to the dear parents.

If any among us are idle, and a good many of us are credited with this disease, we are rebuked; if, on the contrary, we are industrious and earn an independent livelihood, we are abused for taking the bread out of our brothers' mouths.

If we do not work, we are told that we cannot make good wives; and if we do work, that we shall be unable to make our husbands happy because they want companions more or less frivolous when they have been at work all day. Alas! we should be thoroughly deserving of all the compassion showered upon us from time to time, if we were moved one iota from our steady purposes by all the conflicting advice and opinions offered us.

It is our determination not to be objects of compassion, neither will we be useless lumber in our homes, neither will we arrange our lives with the one purpose of entrapping men to marry us.

We did not ask to come into the world but were sent here by a loving Father, and whatever our position we are thankful for being here, otherwise we should have known nothing of a Heavenly Father's love and glory and majesty. We should not have known the meaning of being His children.

And as to our earthly parents, there are very few indeed who would be glad to get rid of us, be they ever so poor, and as a rule we feel so sure of their love and help that we should not believe it even if they themselves told us they wished we had never been born: but enough of this. The fact remains that we are born and that God created us male and female; and what is more, He created us with powers for a purpose, and He surely expects us to use them, otherwise our hands, our brains, our heads, our hearts, might have been omitted.

Are we to be sorry that it is now quite rare to find, among us girls, one that sits down all day reading novels with a pet dog in her lap which she from time to time caresses, or that a girl willing to work is deterred from it by the fear of lowering her position thereby?

We are convinced that work is good for us; we are better for it physically, mentally and spiritually. We are altogether happier for it, and we object to being compassionated for doing that which our talents fit us for.

No girl will be the worse for a little money in the Savings Bank, but it will go doubly as far if she has placed it there out of her own earnings and not out of her father's.

We look round upon many families we know, and wherever we see a girl petted and thought too pretty or too delicate or too anything else to work, she is invariably discontented and unhappy—and why? Because she is not fulfilling her mission in the world.

If, as people say, we are robbing our brothers of their work, it must be because we take more pains with the work and do it better than they. Therefore let them look to it.

There is work for everybody; if not in one way, then in another. A lady whom some of us know was once very rich, and when her husband died she found herself quite poor, and would have been obliged to live upon her friends but for one gift she possessed, and peculiar as it was, she resolved to use it. It was that of mending clothes and linen, which she could do beautifully. She made her position known to several families who gladly engaged her on stated days in the month from nine in the morning till six in the evening, and needless to say, she is proving the greatest comfort possible to mothers of large families. For some years now she has kept herself not only independent, but able to put by a little for old age or sickness, and no one thinks of looking down upon her because she is doing the one thing she knew she could do well. In the same way a clergyman's daughter deprived of means had to face the world for herself and little sister, and knew that no one could clean or trim lamps better than she. So she at once made this accomplishment known, and she is getting a very tolerable income in this way without any loss of self-respect.

Working does not make us less womanly or less helpful in our homes or less affectionate to our parents, or, depend upon it, God would not have given us the capacity and the ability to work.

Who is the strength and the brightness of the home—the busy or the idle girl? The one who uses her brains or the one who lets them rust?

If people will interfere with us at all, let them try to build us up in vigorous, healthful work, teaching us that however humble the work we do, we give it dignity by doing it to the best of our ability.

Many of us girls belonging to the so-called upper class are extremely clever in dressmaking and millinery. Should we not prove benefactors to the small tradesmen and servant classes, if we could take rooms in various parishes where they could bring their materials and get them made up prettily and cheaply? As it is now, their dresses and bonnets are in wretched taste and badly made, and at a sum greatly in excess of what they can afford.

We have come to the conclusion that we shall live better lives and longer lives if we work well and cheerfully at that which falls to our lot. The nation will be the better for our influence and example, and our brothers cannot and will not be content to smoke and dawdle away their time at clubs and music halls while we, their sisters, are earnestly working.

Looking at things all round, we come to the conclusion that there is plenty of work to do, not only for our fathers and brothers but for us girls also. Out of this work we will select that which we can do best, whether it be nursing, teaching, book-keeping, mending, lamp-cleaning, dressmaking, or anything else. At the same time we will endeavour to hold fast by those attributes of modesty, gentleness and patience which belong to good women, and while we enrich the home with our earnings, we will try to be its sunlight and its ornament.

VARIETIES.

DON'T FRET!

If you've each day good food in sight,
If you can sleep eight hours at night,
With appetite to send you to it,
And have the bed on which to do it—
If now and then a holiday
Of simple pleasure comes your way,
You have far more than many get—
Don't fret!

MOST PROBABLE.—The probability is that things are neither as black as they are painted, nor as white as they are whitewashed.

"WE SHOULD MOVE."

Teacher (*to new scholar*): "Now, Mary, I'll give you a sum. Supposing your father owed the butcher £3, and 50s. to the baker, £5 to the coal merchant, £4 to the landlord——"

Mary (*confidentially*): "We should move."

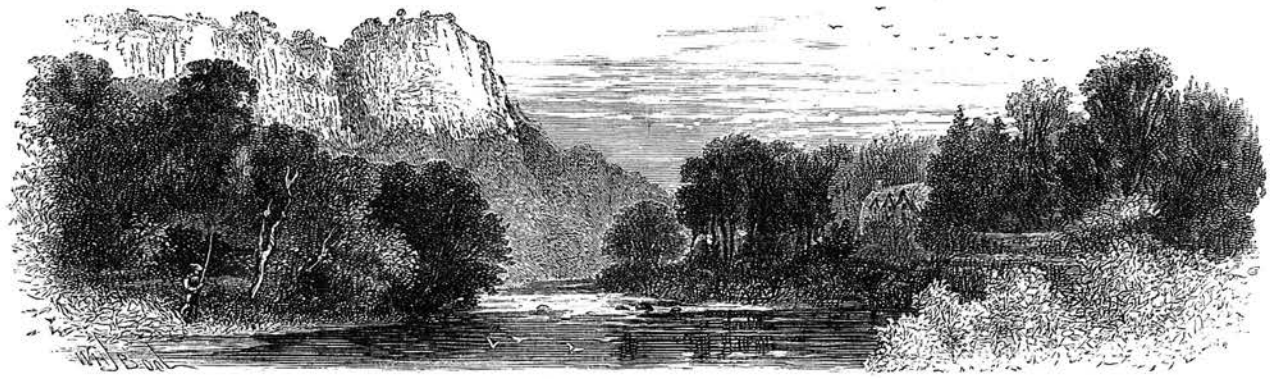
AN INDUCEMENT.—It is said that very few ladies continue their piano-playing long after marriage. This announcement is made in order to encourage young men to enter on matrimony!

INDEPENDENT OF CIRCUMSTANCES.

Girls who find themselves inclined to exaggerate the importance of their surroundings would do well to remember these words of a wise divine:—

"Christians might avoid much trouble if they would only believe God is able to make them happy in Himself, independently of all circumstances."

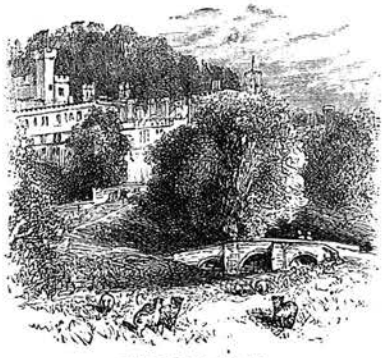
IN PURSUIT OF HAPPINESS.—Happiness is like a kitten's tail—hard to catch, but there's plenty of fun in chasing it.



HIGH TOR, MATLOCK.

A DASH THROUGH DERBYSHIRE ON AN EXPRESS ENGINE.

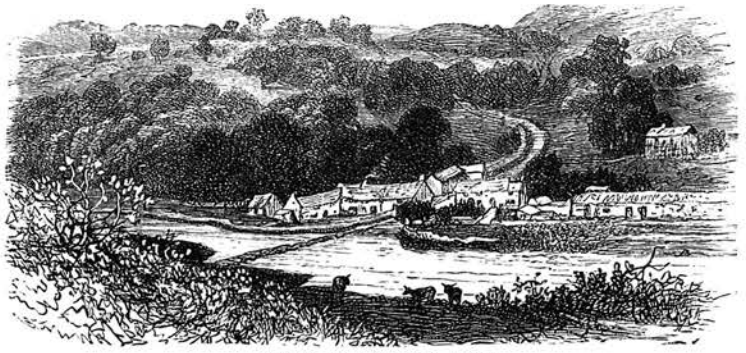
THERE is a vast and indispensable difference between the driver of the mail of to-day and the driver of the mail of yesterday—that is, of half a century ago. Tony Weller and Toodles are diametrically distinct types of character. A short, stout, purple-pimple-faced, twin-chinned, red-nosed, many-caped, dram-drinking, jovial Jehu was the driver of "The Commodore," or "The High-flyer:" greasy, grimy, gritty, preternaturally steady, serious, and saturnine is the modern coachman, the man who drives the Midland "Scotchman," the London and North-western "Wild Irishman," or the Great Western "Flying Dutchman." The route traversed by the Iron Horse has none of the characteristics of the old road about it. Instead of pleasant, oldfashioned hostelries, with wide courtyards and rambling galleries, we have now uncompromisingly utilitarian stations, and severely uninteresting junctions. Signal-boxes and level-crossings apologise for the absence of the odd, old-world toll-gates. For stables we have circular steam-sheds, as black as Erebus; and the steed is groomed by a sooty band of Plutonic attendants, more sable than chimney-sweeps, who bear bunches of subtle-smelling oil-waste in lieu of the clean and sweet straw of lang syne. The duties, too, of the driver of yore were easy of execution. His life was a happy holiday existence. He—"good easy man!"—was perplexed with no elaborate code of rigorous regulations. He was guided by only one rule—the Rule of the Road—which has been put into four lines :—



HADDON HALL.

"The Rule of the Road is as plain as one's hand—
T' explain it I need not be long:
If you keep to the left you are sure to be right;
If you keep to the right you are wrong."

But the charioteer of the modern mail is a man signally oppressed. He has to distinguish between conflicting signals of red, white, and green; between disc signals and semaphore signals; between home signals and distant signals; between fog signals and plate-layers' signals. He must possess an amazing memory as to the number of whistles he has to give in passing this junction, and the number required for that. He has to serve a hard apprenticeship to his work. A youth, he enters the engine-shed as a cleaner. He is promoted by-and-by to the duties of a stoker, and passes, in course of a tedious training, to occasional responsibility as a shunting driver. Then he proceeds to regularly drive a goods train, progresses to passenger-engine work, and reaches the highest grade of his calling when he takes charge of an important express train. The Don Phaethon of the past had hardly the cares of the modern cabman: the



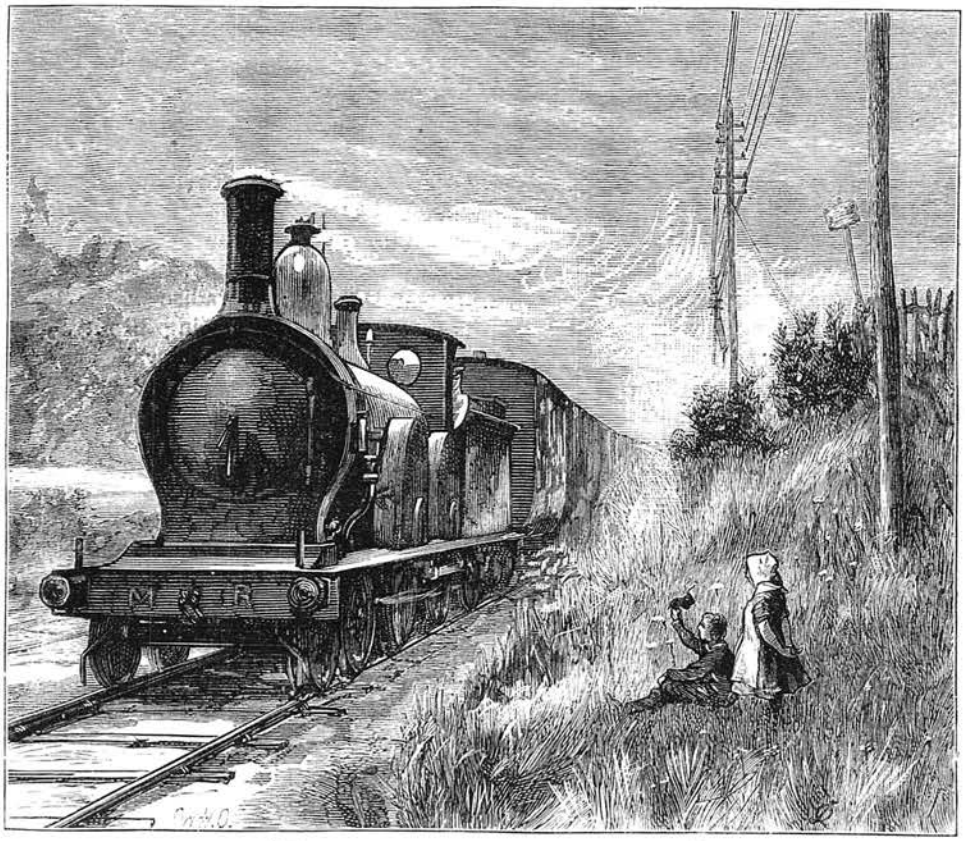
VIEW IN MONSAL DALE.

Don Phaethon of the present has responsibility writ large on his anxious face. He is the daily custodian of several hundred lives. He must always be on the alert. A momentary suspension of vigilance on his part might spell the direst disaster. The passing of a signal at danger might result in a loss of life, and a wreckage of property, too appalling to be over-

estimated. The law does not recognise his human fallibility. A verdict of "manslaughter" awaits the indiscretion of his eye, or the weakness of his overwrought frame.

I have been betrayed, reader of mine, into this rather digressive dissertation on engine-drivers and engine-driving, by observing the movements of the driver of the Midland express, as he guides his train along its gleaming path of steel Manchesterwards. The courteous kindness of the chief of the Locomotive Department has provided me with a place on the engine, but the driver is too engrossed in his duties to appear sensible of my presence. His hand never leaves the regulator, save to sound the whistle, and he keeps a lynx-eyed look-out through the glass before him, that never wanders. The fireman, who necessarily wears a very dirty face, and a butcher's blouse, blue-black, and who like Toodles is "besmeared with coal-dust and oil, and has cinders in his whiskers, and a smell of half-slaked ashes all over him," is kept continuously active by the demands of the furnace. The locomotive, like the fat boy in the "Pickwick Papers," is always demanding refreshment. The coal-laden shovel is scarcely ever absent from its hungry mouth, while its consumption of water shows a thirsty weakness for the "crystal spring," which ought to induce the Good Templars to make the Iron Horse their patron saint. But do not let us malign the active animal. A steam-pressure which runs up to 250 pounds to the square inch needs some support, you know.

A quarter of an hour ago I was standing on the busy platforms of Derby Station, admiring this splendid machine which is now throbbing with restless life, as it paused for a few minutes in its journey from London. Its leading "bogie" wheels were pointed out to me with pride, and my attention was also attracted to its coupled driving-wheels, each 6 feet 8 inches in diameter —but now the telegraph posts are flying after each other in an endless chase, and the foot-board on which I stand quivers with motion. Just as a "land-lubber" has to find his "sea-legs" on ship-board, so a landsman riding on a locomotive engine has difficulty in keeping his feet. To move without support is an impossible operation. Before we started the dazzling dog-day heat was overpowering. A burning pulsation of the air was the only suspicion of a breeze. But now a very whirlwind is rushing past, and if it were not for the gridiron, which is frying my feet to a turn, the sensation of riding on the engine would be one of cucumbrian coolness. Nottingham Road, Saint Mary's, Breadsall, Little Eaton, and Duffield have flown past with startling fleetness. Now Milford Tunnel receives us into its gloom, and presently we are flitting through the fields again, with views before and behind, to the right hand and to the left. The cud-chewing cattle contemplate us with philosophic calmness. Sir Francis Head, in his "Stokers and Pokers," tells us that when railway trains first ran, the startled cows, and sheep, and horses used to scamper away from the sound of the approaching train for their very lives, but now it is a matter of difficulty to keep them off the lines. They heed not the board of "Caution to



'FLITTING THROUGH THE FIELDS AGAIN."

Trespassers," and cow-catchers, after the American principle, may yet have to be adopted upon English railways. Only the other day the "Scotchman" lowered the price of beef at Settle by running into a herd of bullocks. But this by the way.

We have torn past Belper. There is something singularly inspiring in this rush at a mile a minute through charming scenic surroundings. One enjoys what De Quincey calls "the glory of motion." Stay! This sudden shutting off of the steam, and the prompt application of the brakes, is alarming; but the precaution, it appears, is only taken for the safe rounding of the severe curve at Ambergate Junction. Behind is our train, winding round the curve like a gliding serpent, a train of long twelve-wheeled "bogie" carriages, and Pullman cars. Before us opens out the Vale of Matlock. A sylvan spot, this valley at Ambergate, with its radiant river rippling under the tinted trees; its wonderful wealth of foliage, rising tier above tier in banks of leafy loveliness; and its background of Derbyshire hills swelling in the sunlit perspective. Onward we urge at sensational speed, shooting numberless bridges, whisking over the river here, booming through a tunnel there; now darting through a deep cutting, whose scarped and rugged sides are diversified with feathery ferns and golden gorse; then dashing through the forest growth which skirts the park of Alderwasley, with tall trees casting soothing shadows on either side, and forming an archway of luminous leaves overhead. To our right is the tall, tower-crowned hill, locally known as Crich Stand. Yonder, nestling among the trees on the wooded height, is Lea Hurst, the home of Florence Nightingale. Whatstandwell, in all its wooded beauty, is left behind. Cromford, with its grey church communing with the whispering river—with its Willersley Castle, the residence of the Arkwrights, on the hillside—and with its naked rocks, like my Lady Godiva, "clothed on with chastity," in the shape of waving flounces of graceful green—is reached, and now we are hissing through the long tunnel which gives access to Matlock Bath. A "hurrygraph" of the Swiss beauties of Matlock Bath, a flying *coup-d'œil* of the Heights of Abraham, of the Derwent tumbling in cascades of foam-flecked water over its boulder-bestrewn bed, and of the white houses perched upon the hill-sides, and then we are burrowing under the High Tor. Soon Matlock Bridge bursts past. Then Darley Dale opens out fresh vistas of Peak scenery. That isolated eminence to the left is Oker Hill. It wears a coronet of two sycamore-trees. There is a tender tradition attached to these sycamores which Wordsworth has recorded in a sweet sonnet:—

> "'Tis said that to the brow of yon fair hill
> Two brothers clomb, and, turning face from face,
> Nor one look more exchanging, grief to still
> Or feed, each planted on that lofty place
> A chosen tree; then, eager to fulfil
> Their courses, like two new-born rivers, they
> In opposite directions urged their way
> Down from the far-seen mount. No blast might kill
> Or blight that fond memorial;—the trees grew,
> And now entwine their arms; but ne'er again
> Embraced those brothers upon earth's wide plain;
> Nor aught of mutual joy or sorrow knew
> Until their spirits mingled in the sea
> That to itself takes all, Eternity."

Past Darley Dale Church, which by common consent is allowed to have the oldest yew-tree in the country. The guide-book historiographers say that the tree is 2,300 years old, and that its girth exceeds ten yards, facts which will not send the world into convulsions of doubt. A fugitive glimpse of that Darley Valley whose beauties evoked from the poetic pen of Lord John Manners some stanzas less notorious than the lines—

> "Let wealth and commerce, laws and learning die,
> But leave us still our old nobility."

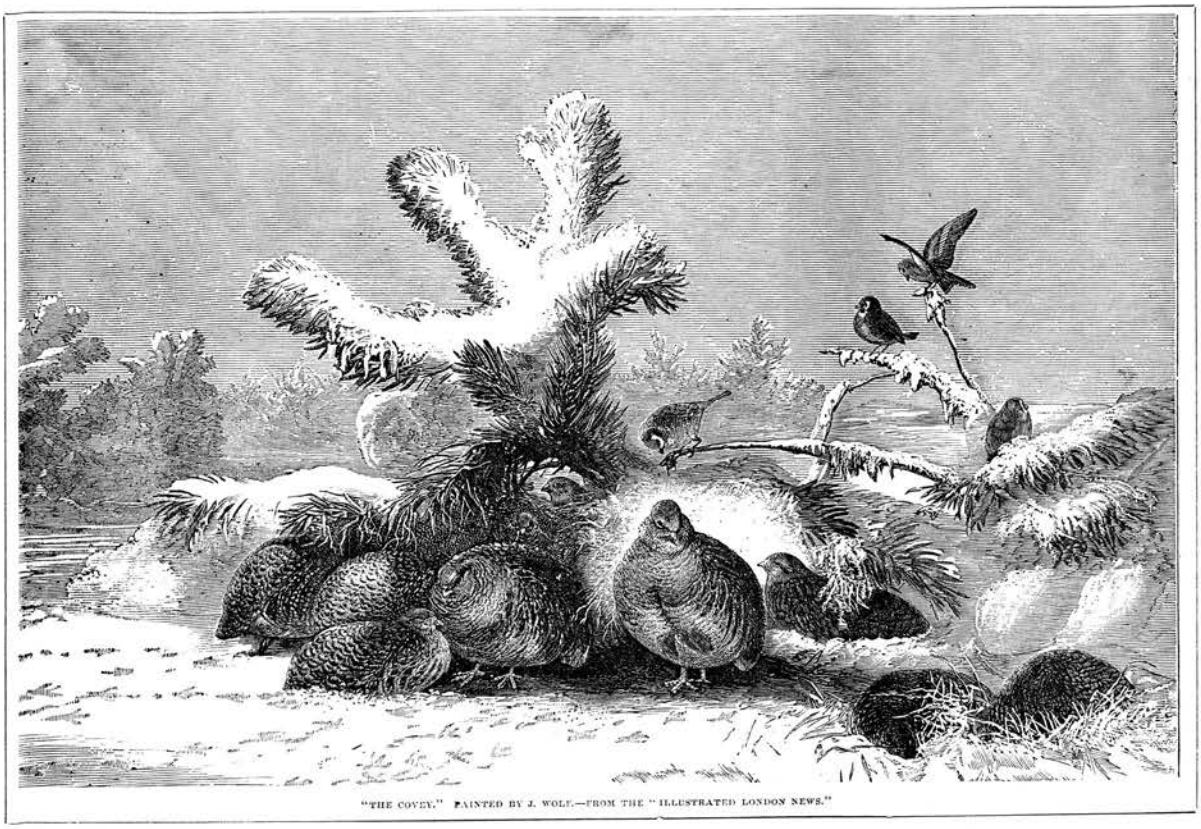
Rowsley Station slips past in a cloud of steam, and now we pant into a long tunnel which burrows under the time-hallowed towers of Haddon Hall. Out into the genial light of day again. In the hay-scented meadows the winding Wye, shining like a band of burnished steel, wanders about the country with serpentine bendings. Bakewell, a pleasant old town tucked in by the hills, hurries past. Hassop and Longstone succeed each other with startling rapidity. Now Monsal Dale—the Paradise of the Peak—reveals all its bewitching, bewildering beauty. The line runs along the hill-side, and the valley is a great distance below. Soon we are introduced to Cressbrook Dale, where the Wye winds through waving woodland heights; and then, after a tantalising tunnel has cheated us of views of poetic beauty, Miller's Dale is reached. The picturesque aspect of many of the towering tors in this district is being impaired by the sacrilegious workings of the limestone companies. Utilitarianism would run a siding connection into Arcadia itself, were the project practicable; but we are not yet so depraved as our 'cute cousins "across the ferry." The romantic rocks of this neighbourhood are not yet "coigns of 'vantage" on which to paint or paste advertisements relating to Drake's plantation bitters, or Horatio P. Smith's curling fluid, or Cato R. Browne's two-dollar prize pantaloons. Mr. Ruskin waxed very wroth when the railway was carried through this enchanted valley of the Wye. "That valley," he wrote in "Fors Clavigera," "where you might expect to catch sight of Pan, Apollo, and the Muses, is now desecrated in order that a Buxton fool may be able to find himself in Bakewell at the end of twelve minutes, and *vice versâ*." When the Kendal and Windermere Line was projected, Wordsworth was similarly agitated, and selfishly called on the "mountains, vales, and floods" to "share the passion of a just disdain." Both railways, despite the protests of the ruling poet and the rampant reformer, are, however, accomplished facts of substantial proportions; and the one line has opened out all the loveliness of Lakeland to the time-tied tourist, while the other has introduced to town-toilers a district which was one of Nature's sealed and inaccessible books. The Midland engineers have certainly not marred the picturesque passages of these fair valleys, for the work of man fighting with Nature for the mastery adds to, instead of detracting from, the grandeur of the prospect. It

is a line of stupendous works, which compel admiration; of sharp curves and severe gradients, of lofty viaducts and graceful bridges of great strength spanning gaping chasms, of cuttings hewn out of the limestone rock, and embankments rising out of the valley.

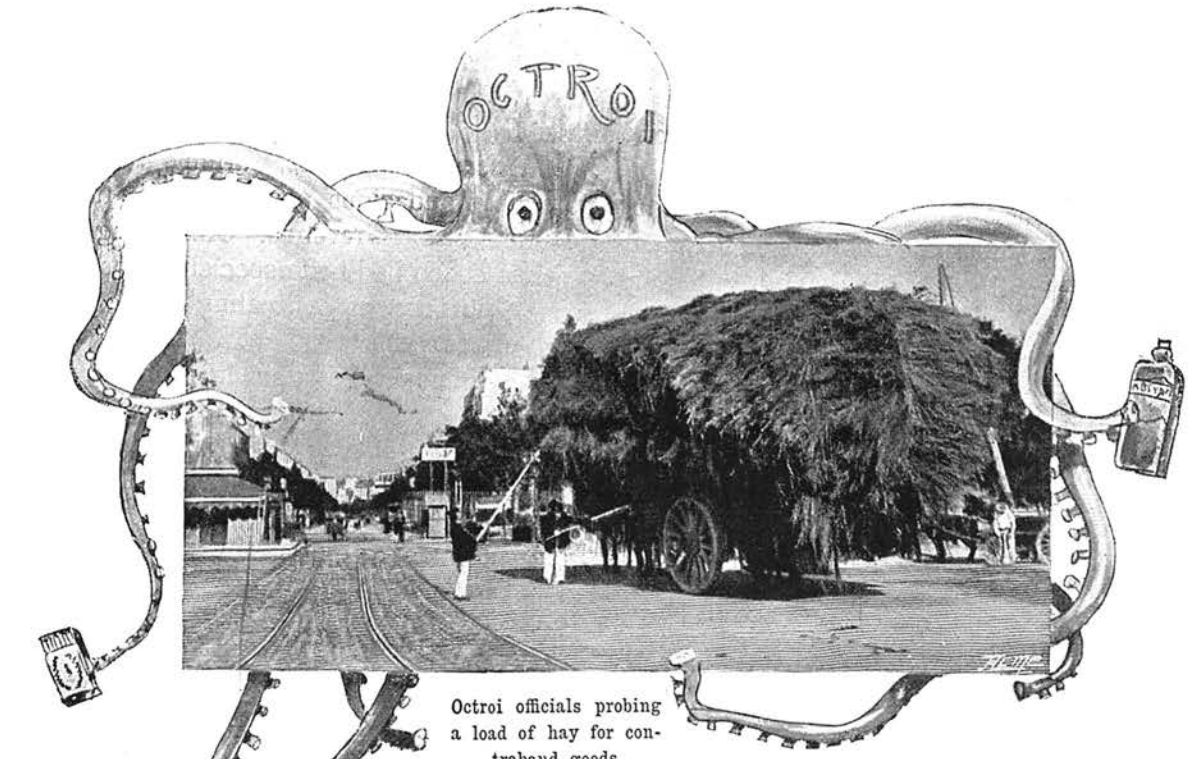
We pause at Miller's Dale Station to detach the Buxton passengers. Now the guard blows the whistle to proceed again, and the engine answers with a scream. A stout gentleman, who carries a red nose and a fishing-rod, pants pathetically up the platform in a perspiration and a hurry. But he is just one puff too late, and in waiting for the next train he will have time to moralise on the evils of unpunctuality. We are now running by the side of the Wye, on a terrace on the hill-side. The tunnels rob us of many charming vignettes, but the ride is remarkable for sweet surprises in scenery. The ravine along which we now pass is Blackwell Mill Junction. To the left is the loop line to Buxton. Presently the "chay-chay" of the engine tells that we are climbing up the stiff gradient along Great Rocks Dale. The blocks of limestone, peering here and there through the grass, are liable to suggest petrified sheep to a mind addicted to comparisons. Soon Dove Holes is reached, and the line drops down towards Manchester through a tunnel two miles in length. The black obscurity is now before us—a detonating signal explodes with a loud report under the wheels, and the iron monster gives an unnatural scream, as though it had received a death-wound, and with palpitating heart and quivering sides plunges into the Stygian vault. A caution signal sends us on at slackened speed, then a white light waved in the darkness puts the steam on again. That scream has sent strange echoes flying. Ten thousand and one noises seem to compete in a clattering chorus of deafening, deadening din. The darkness may be felt. Sulphur fumes are added to the damp earthy smell. The circle of white light, thrown out by the furnace-fire, gives Rembrandt-like portraits of the enginemen at their post, peering through the gloom. A reverberating rumble is heard quite near. Two ogre-eyes are burning their way through the darkness. In another second an avalanche of thunder and lightning is hurled past on the "up line" with awful velocity. With a shriek, and a rattle, and a roar, on and still on. Fantastic flakes of fire flutter from the engine-chimney, and fly fitfully overhead. Now and again an air-shaft in the tunnel-roof sends down a delusive glimmer of day. Right in front is the tunnel-mouth, in size looking like a threepenny bit: it gets larger: now it assumes the dimensions of a sixpence: it grows into a shilling: soon it appears like a florin, and presently resembles a five-shilling piece. Another minute's imprisonment in this vile vault, and then we burst into the summer sunshine again. Viaducts carry us over Chapel-en-le-Frith, and give us Asmodeus-like privileges with regard to peeping down cottage chimneys and into bed-room windows.

New Mills is the next station, and after passing that we pull up at Marple, where the Liverpool portion of the train is uncoupled. We have passed through the Peak now, and the poetry of the railway gives place to common-place prose. So I find a seat in the train for the ten miles which separate Marple from Manchester.

STREPHON.



"THE COVEY." PAINTED BY J. WOLF.—FROM THE "ILLUSTRATED LONDON NEWS."



Octroi officials probing a load of hay for contraband goods.

SMUGGLING INTO PARIS.

By V. Gribayedoff.

'T was a German philosopher, I believe, who once remarked that every human being was born a smuggler. This was putting the case somewhat broadly, no doubt, and yet the best of us must admit that, brought face to face with the emergency of declaring dutiable articles at the frontier, fear of detection in case of failure, far more than a desire to benefit the state, impels us to submit to the inevitable. Nothing in the world would induce us to come by the smallest sum dishonestly; nevertheless, but for the possible consequences, we would not hesitate very long to defraud the government of its due on a question of a few boxes of cigars or a bottle or two of liquor.

This being the general condition of mind, it is easy to understand why the smuggler occupies so enviable a position in fiction, and why, in spite of the price set upon his head in earlier times as a vulgar criminal, our story writers rank his exploits in the same category with those of knights errant, high sea rovers, and soldiers of fortune. These story writers know their public, and they know that in the nature of things the reader must have a soft spot for this species of evil-doer. This instinctive feeling of sympathy, common to us all, for the man who gets the better of the custom-house ogre, should make it easy for us to comprehend the special sympathy that goes out to the octroi smuggler among the lower class of Parisians. The octroi is that huge, tax-levying octopus, with its head or central bureau, Place de l'Hotel de Ville, in the centre of Paris, and its tentacles extended to all points of the fortifications which constitute the city limits. In one year this perfectly-organised machine, with its hundreds of agents and employees, extracts over one hundred and fifty million francs from the purveyors of provisions and supplies entering the great city, and thereby keeps the cost of living there at a higher level than anywhere else in France; for, although every township has its octroi, the rates are proportioned to the size of the population, and Paris, being the largest

of all, is the most heavily burdened with taxation.

The octroi, in short, is a sore point with many Parisians, and the man who can successfully escape its exactions is generally considered a hero among his fellows. For years and years the game has gone on between octroi officer and smuggler of high and low degree, and at this day, as a result, there exists in the building, Place de l'Hotel de Ville, a perfect museum of queer receptacles

Testing an oil-cask.

and contrivances, such as boxes with secret compartments, tin cans with false bottoms, hollow harness, and so on, all of which were intended to deceive the lynx-eyed guardians at the *barrière*.

Interesting as is this collection of itself, more still are the explanations and anecdotes connected therewith. It was from an old retired employee of the service that I learned some of the details which are given here—an old fellow with a white moustache and goatee, looking very much like a marshal of the Second Empire, whose very perceptible limp is due to his having jumped into the fortification ditches one night many years ago while in pursuit of a band of tobacco smugglers.

The octroi tax on alcohol being particularly high, some $2\frac{1}{2}$ francs per litre, this product has ever formed the staple article on the smuggler's list. A sample alcohol smuggling story is the following one: Not so very many years back an anonymous letter was received by the octroi authorities, warning them of an incredibly audacious plan to cheat the city government of its revenue. According to the writer a coach had been specially constructed for the purpose of concealing the liquid in great quantities.

Every conceivable cubic inch of space had been utilised, from the hollow seat in the interior to the horse collars. Even the shafts, the axle-trees, and the spokes of the wheels were hollow, and contained their quota of the contraband article.

But even this was not the most extraordinary part of the story. The anonymous author added that the vehicle had the general appearance

Sounding a vehicle for hidden compartments.

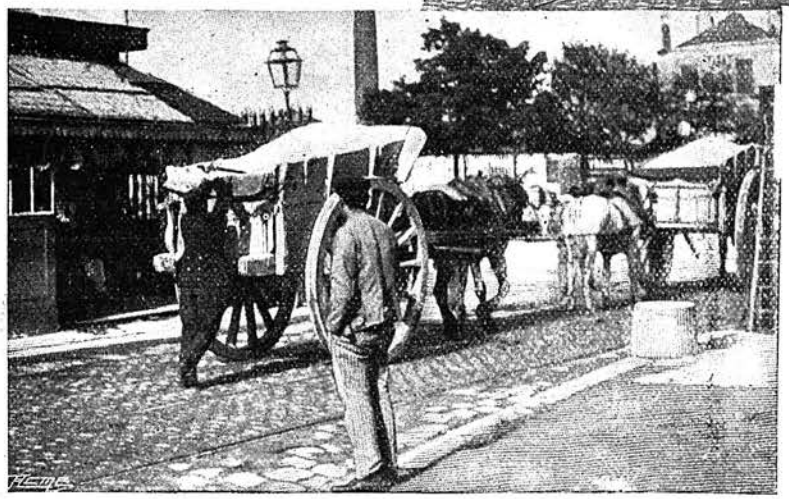
of a *voiture de noce*, or wedding carriage, with white satin linings and cushions, and that on the day of its passage through the particular *barrière* it would be occupied in all probability by a make-believe bride and groom.

The officials of the department, though suspecting a hoax, remained nevertheless on the *qui vive*, and, surely enough, on the day announced, there appeared at the *barrière* a handsome wedding coach drawn by a pair of dashing bays. In the interior sat a pretty

maiden in a white dress with orange blossoms, a young man in a frock coat, and an elderly dame. Furtively, the officials approached the vehicle and commenced an investigation, much to the surprise and consternation of the occupants, for, as it soon transpired, the anonymous letter writer had told the truth.

The bride even fainted outright, but this did not help matters, and before long the officials had succeeded in finding the hidden taps, and securing 220 litres of alcohol, the duty on which would have aggregated nearly 600 francs.

The scheme of the smugglers, it appears, was to pass the same quantity in the same manner through each one of the octroi stations of the fortifications, after which the whole performance would have been gone over again by another bridal couple. But, as we have seen, the scheme, unfortunately for its ingenious and enterprising originator, was not destined to succeed; and besides losing his first shipment of goods, and having his carriage confiscated, he passed a few dreary weeks in the prison of Mazas, recently demolished.



Probing a cartload of gravel.

Here is another anecdote of the same kind, equally edifying. The officials at one of the smaller city gates had become accustomed to the regular appearance at nightfall of a handsome brougham, containing two distinguished-looking individuals, one of whom, apparently an invalid, always remained nestled in the folds of a heavy fur mantle. Night after night the carriage passed through the *barrière* and no questions were asked, for why should such elegant gentlemen be disturbed? But one evening, as luck will have it, one of the horses slips and falls.

Quickly all the officials rush forward to give a helping hand. One of the occupants also steps out. All unite to help the prostrate beast. Suddenly, an official observes the second occupant in the coach, and exclaims:

Examining barrels.

"*Allons, monsieur!* why don't you get down also? It will make things easier."

But there comes no reply, and for a good reason too. The gentleman addressed is made of zinc, and hollow at that, with a capacity of a hundred litres of alcohol!

The contraband dummy has been employed in another form—witness the recent capture by an octroi official of an india-rubber man, also brim full of alcohol. This lay figure was made to resemble a day labourer. It was life-size, and dressed in a blouse and the ordinary black alpaca cap. At dusk its two owners, similarly attired, each taking one arm, approached the Porte des Ternes.

To the casual observer it looked as if two

working men were leading a drunken companion home. But the experienced eye of the octroi official detected the fraud at a glance, and he made a bee-line for the trio. Seeing themselves discovered, the two smugglers dropped the dummy and ran off like hares. Their counterfeit companion with his 150 litres capacity fell an easy prey to the rigour of the law.

Inasmuch as almost every article of everyday use or luxury, including such ordinary edibles as meat and vegetables, are subject to octroi duties, the officials at the *barrière* may be said to have their hands full, keeping track of the procession.

Playing cards, matches, and truffles, being heavily taxed, are also prominent features on the contraband list, and the successful smuggling of a package, comparatively small in bulk, of any of these three commodities always proves a profitable operation.

Women — yes, indeed, women, for they are among the worst offenders of all— have likewise made small fortunes bringing in these highly-taxed articles in special rubber bags worn beneath the skirts. Similarly has the make-believe working man carried through many a small shopful of dutiable articles in the ingenious apparatus resembling a life-saving belt, worn under his blouse.

Examining a travelling bag.

However, the greater amount of smuggling is unquestionably accomplished with the help of vehicles, as the writer had an opportunity to learn the other day while stationed with a camera just outside of the Porte de St. Cloud, one of the busiest entrances to the city.

As it would take considerable time and labour to turn over the contents of every vegetable waggon, for instance, the octroi men content themselves with probing the merchandise with a long iron stick called a *sonde*. This instrument has at its tip a narrow groove, and if any foreign substances be hidden in the centre of the load, their presence is at once betrayed by the small particles adhering thereto. Probing rods are also used on consignments of straw and on loads of gravel. Only a few weeks ago a bag of Perigord truffles worth a thousand francs was located in the centre of a perambulating hay rick.

In another photograph we see an octroi officer using the so-called "tringle," another implement peculiar to the service, in order to gauge the contents and value of some oil cans. It is mineral oil in this case, but, talking about oil in general, I may say that the product is one that often brings out the octroi smuggler's ingenuity. For example, a load of olive oil in so many cans will reach a barrier on the west of the city, ostensibly destined to a point beyond the eastern limits. A declaration is made in proper form, the octroi duties are paid, and the owner proceeds on his journey armed with a receipt.

Arriving at the barrier on the other side with his merchandise he presents this paper, and the list being compared with the load, he receives his money back and passes on. All this looks regular enough, but unless the octroi men be on the *qui vive* the oilman—assuming him to be a smuggler—is liable to dispose of his merchandise within the city limits, and then fill up his cans with water all but an inch on the top, which would be oil.

And thus it goes on all the time, a constant game of catch as catch can between the green coated municipal servant and his wily opponent. I have shown that little has been left untried by the latter; it is equally true to say that to him, as to the legendary "sapeur," nothing is sacred; witness the metal mortuary wreaths forming part of the octroi collection, seized on a genuine hearse containing a real corpse, which, on investigation, proved to be hollow in the interior and to contain several litres of absinthe.

AROUND ST. PAUL'S.

ONE bright May morning I found myself threading a crowded street in a strange city, spearing with my questions, as we walked along, a friend who had lived there all his life. Suddenly lifting my eyes from the panorama of unfamiliar and curious sights on either side, and looking up the street, I saw towering in the sky, and glowing in the morning sunshine like a poet's vision, the majestic dome of a great cathedral.

"What's that?" I exclaimed.

Bestowing on my delighted and explosive surprise the smile of self-poise amid familiar scenes, my friend quietly replied, "Oh, that's St. Paul's."

And then for the first time I fairly realized that I was walking the streets of London. A hundred times afterwards, from a hundred different points, all over the city, I caught sight of the same lofty dome, and it remains, more than any other one object, the conspicuous feature in the photographs of the great metropolis that are printed on my memory. All in all, I think there is in London more that is interesting, to an American at least, than in any other city in the world. Boswell has made us familiar with Dr. Johnson's "cat-like attachment" for it. "Sir," said the dogmatic old philosopher, as he sat one day in the Mitre Tavern, near Temple Bar, "the happiness of London is not to be conceived by those who have not been in it." And Cowper, who was not by any means wont to look on life through the same spectacles as Dr. Johnson, sang:

> "Where has Pleasure such a field,
> So rich, so thronged, so drained, so well supplied
> As London—opulent, enlarged and still
> Increasing London."

What was true of its attractions in Johnson's and Cowper's day grows true in a wider and higher sense every year. It is wonderful how almost all the great events of English history and triumphs of English literature have centered there; how few Englishmen of note there have been who have not left associations there. One may spend weeks, going daily over new ground, where every shortest street will detain him with some historical reminiscence, where every turn will frame for him some new picture. For in spite of fog and smoke the streets of London are more picturesque than of most European capitals.

London is a vast world in itself. You are impressed, when you find yourself in it, with its immensity; as one is impressed by the vast reach of the ocean when he steams over it day after day without a glimpse of land or the sight, perhaps, of a single sail. You feel like a mere atom in this vast billowy tide of human life. Cut up into smaller communities London would make a dozen cities equal in population to New York, Brooklyn, Boston, Philadelphia, Baltimore, Washington, Buffalo, Cincinnati, Chicago, St. Louis, New Orleans and San Francisco! It contains more people than our six populous New England states, more than the whole kingdom of Denmark, more than twice as many as Norway, nearly as many as all Scotland. It is said to contain more Jews than Palestine, more Catholics than Rome, more Irishmen than Dublin, more Scotchmen than Edinburgh. There are omnibuses running across the city, by as straight a route as its cow-path streets allow, which start before five o'clock in the morning and barely make two round trips before midnight.

And year by year the great city pushes out its borders, encompassing village after village of the outlying suburbs in its spider web of pavements, and water mains, and omnibuses, and busy traffic. The villas around its fringes, as Hare says, seem to be constantly making an effort to get into the country and never succeeding. Many neighborhoods in the solidly built city still bear the names by which they were known when they were only little hamlets in the fields, miles from the city gates—such as Chelsea, Kensington, Camberwell, Bayswater, St. John's Wood, etc. It is partly because of the absorption of so many villages in the

great metropolis that it is afflicted with such confusion in its street nomenclature. If you wish to visit King street it is possible for you to explore ninety-four different streets of that name before you find the right one. If it is Queen street, your chance of hitting the right one the first time is just one in ninety-nine. Does your friend live on Church street—you are confronted by one hundred and fifty streets of that name besides the one you want! Even of John streets there are one hundred and nineteen, and of New streets—new a long while ago, in most cases—one hundred and sixty-six! It becomes a necessity, in such cases, to give the street a surname, so to speak—as men began to take surnames when James, and John, and Mary became frequent in the same circle of acquaintance. Streets are often designated, therefore, by adding the name of some well-known thoroughfare into which they run, or the special neighborhood to which they belong, as Queen street, Cheapside; King street, St. James Square; Church street, Tooting; High street, Marylebone, etc. And in any case the initials of the general division of the city are usually affixed to the address—"E. C." for East Center; "W. C.," West Center; "S. E.," Southeast; "N.," North, etc.

It was not because the Londoner of other days lacked the skill to contrive new names for his streets that he used the old ones over so many times. It is common to find such odd appellations as Cock and Castle Lane, Long Acre, The Poultry—the most crowded street in London,—St. Mary Axe, Bird in Bush Road, and the Minories. Camomile street, after it crosses the great thoroughfare of Bishopsgate, takes the name of Wormwood street. Paternoster Row, the famous haunt of the book publishers, has an outlet into Ludgate Hill through Ave Maria Lane, and terminates in a blind alley known as Amen Corner. The great fire of 1666 began in Pudding Lane and stopped at Pye Corner! The titled land-owners—nine peers still own most of the land on which London stands—have always delighted in handing down their many-jointed names in the streets running through their property. George Villiers, Duke of Buckingham, contemporary with Cromwell and clapped into the Tower by him, when he sold York House and its gardens, stipulated that he should be commemorated in the streets that should be opened through his former property. The contract was kept in the names of George street, Villiers street, Duke street and Buckingham street, the last two being connected by Of Lane! But those were the days of Praise God Barebone, who gave his name to the Parliament of which he was a conspicuous member, and whose son was christened, "If-Jesus-Christ-had-not-died-for-thee-thou-hadst-been-damned Barebone." Tradition declares that his acquaintances generally dropped all but the last joint of this compound Christian name when they spoke of him.

Up to the time of George the Third houses were designated, not by numbers but each by some sign of its own. Belated revelers doubtless found it easier to distinguish, in the small hours of the night, the figure of the "Golden Unicorn," or the "Swan with Two Necks" than they would have found it to pick out their own door by Arabic numerals. People were sometimes called from the names of their houses; Thomas à Becket being known, for instance, in his early days as "Thomas of the Snipe." In Clements' Lane, Lombard street, the quaint sign of the Three Foxes existed till the residence from which it projected was let at a recent date to three lawyers, who thought it might look like a personal reflection and removed it. Hotel signs are a relic of this old custom and for whimsical tavern names London cannot be surpassed. "The Blind Beggar"—"The Civet Cat"—"The Bear and Billet"—"The Angel"—"The Elephant and Castle"—"The King's Arms"—"The Blue Pig"—"The Bag of Nails" (said to be a corruption of The Bacchanals) still offer you beer, and beef, and beds—these articles being here enumerated in the order corresponding to the London inn-keeper's idea of their relative importance.

The derivation of some of the street names is as curious as the names themselves. Bull and Mouth street was originally Boulogne Mouth, and commemorated the capture of Boulogne Harbor by Henry the

Eighth in 1544. Bunhill Fields, the Protestant Campo Santo, where three hundred notable nonconformist ministers lie buried, is a corruption from Bonehill, so called from its having been one of the chief burial places of the victims of the great plague. Holborn street—or 'Oborn in the vernacular of the omnibus man; 'I'oborn where it rises into Oxford street—marks the course of the Old Bourne, a little stream that ran through the fields into the Fleet. The Fleet itself, now a hidden sewer where it was once a navigable stream, is commemorated by the busy street that connects the Strand with Ludgate Hill. Rotten Row, where the aristocracy of the West End come out on summer afternoons for an airing, was originally Route du Roi—the old route from the palace of the Plantagenet kings at Westminster to their hunting grounds beyond Hyde Park. Then it was kept sacred to royalty, the only other person allowed to use it being, from its association with the hunting grounds, the Grand Falconer of England. And the Duke of St. Albans, as hereditary Grand Falconer, still keeps up his rights by riding once a year down Rotten Row. All other folks who traverse it must go on horseback! Cheapside, now as always full of traffic, was originally spelled chepe—the Saxon word for market. What was once Vine Garden retains its first two syllables intact in the present prosaic name of Vinegar Yard. And what was once Duke's Foot Lane is now Ducksfoot Alley!

In the older portions of the city the streets are narrow and crooked enough to make a Bostonian feel quite at home, or, to use Joaquin Miller's comparison, they resemble the creases in a newspaper which has been crumpled in the hand and then spread out again. Paternoster Row, for instance, from which more books are issued, probably, than from any other street in the world, is not more than twenty feet wide. Teams cannot pass in it except at intervals where the curbstones curve into the sidewalk, making it so narrow that when pedestrians meet at those points one of them must step off upon the pavement. The streets are numbered in a provokingly stupid manner, the numbers running consecutively up one side and down the other. You may stand before the door of No. 101, and be as unable to tell how far you are from No. 201 as if you could neither read nor count. To make confusion worse confounded in trying to find any particular number, the same continuous street may have five or six different names, and as many sets of numbers, in its course —sometimes three or four in the space of a single mile.

A frame building is never seen in London, of course, nor a shingled roof. I do not know that I saw either in all England. Stone is little used out of the more ambitious business and West End streets. Brick walls rise everywhere, blackened with smoke, or brightened after a fashion with frequent coats of creamy paint. The roofs are covered with slate, or with the clumsy corrugated red tile, chinked with mortar, which becomes such a familiar sight to the passenger on the railway trains that enter the city on viaducts as high as the houses. No other architectural feature seems more odd at first than the tile chimney-pots that bristle, like a seven days' growth of beard, over the roofs of the whole city. In an English house every room has its little grate, and every grate its separate flue. The gable wall of a house thus rises into an elongated chimney, wearing a row of brimless, crownless beavers. I have counted more than thirty side by side. Some have a foppish tip, some are smashed down in drunken fashion, the most stand stiffly erect with self-conscious national decorum.

London has solved the problem of rapid transit by a double track under-ground railway that describes an ellipse of fifteen or twenty miles under the busiest portion of the city. The subterranean stations are from half a mile to a mile apart and are reached by an easy staircase from the street. Trains run each way every five or ten minutes, and their muffled rumble is scarcely noticed even in the houses and streets under which they pass. You buy your ticket as you go down, and surrender it to the gatekeeper as you go up after leaving the train. No one seems to watch whether you go where you belong. But if you are caught riding in a second-class coach on a third-

class ticket the probabilities are that you will be hustled before a police magistrate and fined twenty shillings, and that a statement of the case, with your name in bold type, will be placarded on the railway company's bill-boards at each station for the next month or two, as a caution to other sharp-fingered travelers. The great drawback to this method of getting about is the smoke and foul air. But the speed is fast and the stops short, and a trip of even four or five miles is made in a very few minutes. The first cost of burrowing such a road under the city is very great, but it is well patronized and pays good dividends. In pleasantness for the passenger it cannot compare with the elevated railways of New York. But the stubborn Briton would make a desperate resistance to such an invasion of noise into his second-story windows as the New Yorker endures.

Aside from this subterranean route the Londoner has excellent facilities for getting about. Omnibuses run everywhere. Street cars—tram cars, they call them—run in the outer districts but are not allowed to lay their rails in the narrow and crowded streets in the heart of the city. Both 'buses and tram cars are fitted up with seats on the roof, which are the pleasantest and most patronized in fine weather. Fares vary, according to distance, from twopence to sixpence. The number of passengers which each 'bus or car is allowed to carry—and that is no more than can be comfortably seated—is conspicuously posted up. The conductor who allows more to enter is liable to arrest, on the complaint of an aggrieved passenger to a passing policeman. The supply is so nearly equal to the demand, though, at all times of the day, that I never happened to hail a 'bus in which I could not find a seat—unless it was just after one of Moody's great meetings had been emptied into the street near by. The London 'bus-driver delights in a plug hat with wide brim, tight-fitting driving gloves, boots polished to perfection, and the reddest nose in the city. He pays no attention to the collection of fares and can devote all his mind to sitting up straight and chaffing the driver of any other 'bus whom he succeeds in crowding in front of. To mount the seat beside him, stroke his fur the right way and ask questions, is about the best method of getting acquainted with the points of interest in the city. Each 'bus has its conductor, or "guard," perched on a high step behind, who collects your fare as you step out, sometimes descending and standing so long on the sidewalk making change that he must trot on half a square to overtake his 'bus.

The one-horse cabs, though, are the pleasantest conveyances we find in any English city. The two-wheeler—called the "Hansom," from the inventor's name—carries two passengers, and is hung so low, in front of the axle, that it is an easy step from it to the ground. The driver sits on a high perch behind, with his reins running over the top, and the passenger can shut himself in with glass doors from wind and rain if he wishes. These being lighter make better time than the four-wheelers—which generally seem to fall heir to the scrubbiest old nags in the city—and are preferable when there are not more than two in the party or there is not much luggage. The fare, fixed by law, is one shilling (24 cents) for two miles or less, for either one or two persons, with a sixpence additional for every additional mile, and a sixpence for every fifteen minutes it is kept waiting. The four-wheelers, which resemble a one-horse hack, and carry trunks on top, will accommodate four passengers inside and one on the seat with the driver, the charges for one or two persons being the same as in a Hansom, with a sixpence additional for the whole trip for each person over two. A cab must go in any direction the applicant wishes and may be hired by the mile or hour as he prefers. But engagements by the hour are what the cab-man — in the language of Truthful James—despises. These worthies, as a class, are proverbial liars and extortioners, and will generally demand double what the law allows them if they see any hope of getting it. The law, however, guards the rights of their victims very carefully. If a bargain is made beforehand higher than the legal rate the passenger cannot be held for it; if at lower the cabman *can* be held for it. The printed rates must be shown at the request

of the passenger. All a stranger needs is to procure a pocket map of the city and figure distances for himself, tendering cabby the legal fare. If his eminence is not satisfied —and he never is—he can demand your name and address and "summons" you before a magistrate. This he rarely fails to threaten, but always fails to do. It is said to be entirely safe, having first taken cabby's licensed number for use at the police court, if need be, to hold out a handful of change and direct him to take what the law allows him. But I never ventured on such a perilous experiment. There are nearly 14,000 cabs in London. They are always to be found in waiting at the railway stations and places of entertainment, and standing places are assigned for them at frequent intervals on the streets. But the tired pedestrian need never wait long for one if he stops anywhere on a much frequented thoroughfare and hails the first empty one that passes. Much pleasanter and quicker than omnibus or street car, and much cheaper than a hack, it is singular that they have not got a foothold in all our American cities.

The earliest history of London, as well as the derivation of its name, has been lost in the lapse of the centuries. Geoffrey of Monmouth dates its origin to over one thousand years before Christ. Tacitus says it was a great mart of trade and commerce in the time of Christ. Excavations show that modern London is at least fifteen feet higher than the London of the Romans, which "has been buried by the same inexplicable process which entombed the Roman Forum and covered many of its temples with earth up to the capitals of their columns." The slight knolls, rising out of the low meadows that border the broad-bosomed Thames, on which the Tower and St. Paul's now stand, doubtless determined the site of the future metropolis. Rivers were the highways of trade in those days, and merchants were careful to locate where fortified surroundings should make it more of an object for their customers to buy of them than to rob them. It was a stronghold of the Danes, and in Elizabeth's time the city was still inclosed with the walls which were built in the fourth century, and whose gates have handed down their names to the streets that passed through them,—Aldgate, Ludgate, Aldersgate, Moorgate, Bishopsgate, Cripplegate, etc. This inclosure, a district something over a mile in length along the north bank of the Thames, with a width of from a half to three-quarters of a mile, and now the core of the great metropolis, still composes, in the municipal sense, the city of London, and as such has inherited peculiar privileges and prerogatives. Temple Bar—which was taken down last year as an obstruction to the traffic which flows at that point from the Strand into Fleet street—marked the western limits of the city, and even yet, when the queen comes on state occasions to the city, the great iron bar is here swung across the street, and she can only enter after a halt, and a parley, and permission from the lord mayor. Incredible as it seems, less than a hundred and twenty-five years have passed since it was the practice to spike upon the top of Temple Bar the heads of traitors who had been hanged and quartered on Kensington Common, while thrifty people drove a good business on the street below in letting out spy glasses for the passers-by to look at them, at a ha'-penny each! A large Episcopal mitre on the wall of a house in Bishopsgate street still marks the site of the old Bishop's Gate, so called because the bishops of London had a right to levy one stick from every load of wood which passed beneath it—in return for which they were obliged to supply the hinges of the gate. Up to this point the street is called Bishopsgate Within, and beyond it Bishopsgate Without. Cripplegate was so called, it is said, from the cripples who begged there, and near its site stands the old church of St. Giles, the special patron of cripples and lepers.

Aside from Westminster, with its famous abbey and palaces, two or three miles farther up the crooked Thames, it is in the city that the quaintest sights and most of the famous objects of historic interest are to be seen—all of them in rifle shot of each other. I had a desk for my morning work in a little room on Paternoster Row. Within bow-shot on the east was St. Paul's, whose smoky exterior is thought to have a certain

appropriateness, since it was built—at an expense of nearly four million dollars—by a tax on every chaldron of coal brought into the city. Amid its multitude of graves and monuments Lord Nelson's, under the clustering arches of the grand dome, has perhaps the place of honor, a curious comment on the memorable words with which he opened the battle of the Nile—"Victory or Westminster Abbey." Almost as near to me on the south stood the grim windowless walls of Newgate prison, famous in the literature that chronicles the deeds of Jack Sheppard and Dick Turpin, as well as in that which commemorates the misfortunes and persecutions of men of whom the world was not worthy. In its chapel is a "condemned bench," only used by prisoners under sentence of death. Hare says that there are those still living who remember as many as twenty-one prisoners (when men were hung for stealing a handkerchief) sitting on it at once. A stone's throw to the north was Christ's Hospital, the famous school of "the blue-coat boys"—whose queer costume of low shoes, yellow stockings, coat that reaches to the heels, and bare head, always catches the eye of the stranger who meets them on the street. A little further in the same direction was Smithfield, of both sacred and infamous memory for its martyrdoms—where Catholics burned Protestants and Protestants burned Catholics, the persecutor who kindled the fires one year sometimes dying in them the next year. Originally "smooth field," it was a place for tournaments and shows, and gradually came to be the great cattle-market of the city. Now no living cattle are brought there, but the roofs of its meat markets, which are daily filled and emptied of the carcasses of slaughtered animals, cover seventy-five acres. A short distance to the north of me rose the spire of Bow Church, one of the finest of the fifty-four spires designed by and erected under the supervision of Sir Christopher Wren after the great fire. Bow bells have always been famous, and he is a cockney, with birthright liberty to murder his h's, who is born in hearing of them. The church derives its name—St. Mary le Bow—from the fact that it was built upon the Norman arches of the old church that stood there before the fire. This crypt is such a fine one that it gave its name to the ecclesiastical court of the Archbishop of Canterbury, which used to meet in the vestry of this church and is still called the "Court of the Arches."

A few steps further on was the powerful institution whose influence is felt in finance and trade all over the world—the Bank of England. Bounded on all four sides by the street, all its windows prudentially open into a central court, and since the riots of 1780 it has been occupied every night by a detachment of soldiers. Its business requires a working force of twelve hundred men. Its bank notes are printed within the building. The same note is never paid out over its counter twice. The new bill that is issued this morning is retired as soon as it returns, no matter if the same man pays it in again this afternoon without a wrinkle in it. It is allowed to issue notes to the amount of fifteen million pounds on the security of its standing loan of a much larger amount to the government, which constitutes a part of the public debt. For every note issued above that—and it has a circulation of over forty million pounds—bullion of an equal amount must be paid into its treasury, and must be kept there for the redemption of the note when it returns. The traveler on the continent often finds its notes at a premium in gold. No note is issued of a less denomination than five pounds. Every note is numbered, and the name of the party to whom it is paid out is carefully recorded. The practice of keeping a memorandum which will show from whom he receives every bank note that passes through his hands is common, also, with the painstaking London tradesman. It proved a fortunate thing for a friend of mine on one occasion. He had given his wife a ten pound note. Their little child got hold of the porte-monnaie and destroyed the note—as they supposed, by throwing it on the open fire. There would have been no hope of realizing on a greenback under such circumstances. But fifty dollars was worth trying for. The number of the note was ascertained from the parties through whose hands it came to my friend, a sworn state-

ment of the facts was filed at the bank, and after a year or so had passed without its having been presented for redemption the bank paid over the money. The bank takes in and pays out its gold coin by weight. Sometimes it sends out a sealed package and receives it again before the seal is broken, and yet deducts quite a sum from the amount at which it paid it out, to make good the loss—detected by the unerring scales—which occurred by the abrasion of the coins in transportation!

The visitor who has the leisure to wander among them will find much to interest him in the old churches of London. Many of them, also, as well as the streets, bear quaint names. I often passed the church of St. Sepulchre and always wondered who that saint could have been until I learned that the two first letters had been an after prefix—as giving it a more scriptural appearance, I suppose—to the original French name, St. Pulchre. In Leadenhall street is the Church of St. Andrew Undershaft, so called because in the old time it was the custom to erect a May-pole in front of it whose shaft was higher than the church steeple. In the Church of St. Catharine Cree, in the same street, a "Lion Sermon" is occasionally preached in compliance with the conditions of a bequest made to it generations ago by a London merchant, who sought thus to commemorate his escape from the attack of a lion while traveling in Africa.

I cannot affirm that the favorite custom of paving the floor with graves, and lining the walls with monumental tablets adds to the cheerful aspect of these old churches. I never entered one which could not boast of being the last resting-place of distinguished men of some generation. In "The Uncommercial Traveler" Dickens touches this subject in his inimitable way. He says:

"The opening of the service recalls my wandering thoughts. I then find to my astonishment that I have been and still am taking a strong kind of invisible snuff up my nose, into my eyes and down my throat. I wink, sneeze and cough. The clerk sneezes; the clergyman coughs; the unseen organist sneezes and coughs (and probably winks); all our little party wink, sneeze and cough. The snuff seems to be made of the decay of matting, wood, cloth, stone, iron, earth, and something else. Is the something else the decay of dead citizens in the vaults below? As sure as death it is! Not only do we cough and sneeze dead citizens all through the service, but dead citizens have got into the very bellows of the organ and half choked the same. We stamp our feet to warm them and dead citizens arise in heavy clouds. Dead citizens stick upon the walls, and lie pulverized on the sounding-board over the clergyman's head, and when a gust of air comes, tumble down upon him."

Not only have they had a way of burying dead citizens in their churches, but it is one of their studious pastimes to dig them up occasionally and try to identify their bones! Two or three years ago the graves under the pavement of the Tower chapel were rummaged over, with the result that the bones of Queen Anne Boleyn were "almost conclusively identified" as the record states. The head of the decapitated Duke of Suffolk, preserved in tannin, was found with perfect features, and is now kept in a tin box, as part of the bric-a-brac, so to speak, of the Church of the Holy Trinity near by. The remains of Richard Whittington, "thrice Lord Mayor," as the old ballad runs, were three times exhumed by as many different parsons of the church where they now lie in dusty peace.

The city companies, as they are called, —the old merchant guilds—are also a curious institution. Founded originally for some such purpose of mutual protection as trades-unions seek now, most of them long ago lost their original vocation, but they still keep up their corporate existence, for the sake of the vast endowments and special privileges and immunities, of one sort and another, which they have acquired. They are represented in the city government, and from their membership the lord mayor must be chosen. The oldest is the Weavers, chartered in 1164. Then came in succession the Parish Clerks,—or clarks, as they would say,— the Saddlers, the Bakers, the Goldsmiths, the Skinners, the Grocers, etc., to the number of ninety-one com-

panies in all. Each has its separate hall for business and banquets—banquets more particularly, in these days,—with its heirlooms of pictures, plate and other treasures. Some of them have such immense endowments hedged up by all sorts of conditions, that they are really at their wits' ends to know what to do with their revenues. The Ironmongers have an enormous estate which has grown from the bequest of one of their number who left them twenty thousand guineas, in 1723, for the redemption of Christian slaves taken by pirates. An act of Parliament was finally obtained, allowing them—now that the pirates have gone out of business—to use its further income for other charitable purposes. The Stationers' company formerly enjoyed the monopoly of printing books, and long after that privilege was withdrawn they had the sole right of printing almanacs. Though that field is now open to all competitors they still derive a great revenue from their almanacs, which are issued in November—and spelled with a "k." The copyright of all books is still secured by being "entered at Stationers' Hall."

There is no space left to tell of the Tower and its quaint armor, of the Thames and its massive bridges, of the palace of Westminster and its bewigged barristers, of Westminster Abbey and its wonderful beauty, of palaces and parks, of museums and galleries. And there is no need, for are not all these written in the chronicles of the newspaper correspondents? But it would be leaving Hamlet out of the play to say nothing before I close about London weather.

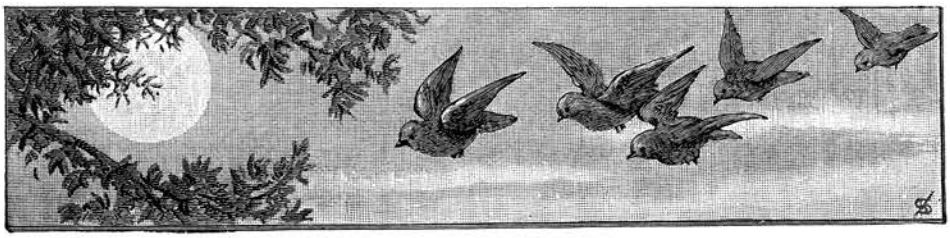
One needs the atlas, when living in London, to convince him that it is three hundred miles farther north than Quebec. Not that the summers are hot. You cannot buy a straw hat, unless you are a sailor, or a linen coat, unless you are a butcher, in the city. It is nothing unusual to see ladies wearing their seal-skin sacques to church in the drizzle of July Sundays. But the winters are wonderfully mild for such a latitude. The utmost provision that is made for heating ordinary residences is a little grate in each room which will hold a few handfuls of bituminous coal. The only heating apparatus in a railway car, in the coldest day, is a flat can of hot water on which to rest your feet. In such a high latitude the length of the days varies greatly, of course, at different seasons. On Christmas the sun does not rise until after seven and sets before four, giving a day but a little over eight hours long. Six months later it rises before four and does not set until after eight, making the day sixteen and a half hours long.

A London fog belongs to that class of objects which writers usually introduce with the remark that it cannot be described—and try to describe it. Fogs are inevitable in a country that has such a humid climate and ocean-tossed temperature. On the railway train they will sometimes shut out every glimpse of the villages through which you pass. But the London fog owes its peculiar hideousness to the alliance of mist with the smoke of soft coal from a million chimneys. Sometimes it gathers slowly; sometimes it settles down suddenly. Sometimes the darkness at midday is almost as dense as at midnight. You can do nothing in-doors except by gas-light. You cannot crawl about out-of-doors without danger of collision with some other traveler. If the Londoners were a nervous people they would surely go distraught. I can conceive of no atmospheric conditions more depressing.

And what with smoke, and fog, and drizzle, sunshine is scarce in London. I found that I was fortunate that I got my first sight of St. Paul's when it was gilded by the sunlight. The Royal Observatory at Greenwich has a self-registering sun-dial which records the exact number of hours of sunshine every day in the year. In the year ending April, 1877, the daily average was only a little over three and a quarter hours. In December of that year there were only six and a half hours of sunshine in the whole month—and not a day in which it did not rain. In November there were only five hours of sunshine, an average of exactly ten minutes a day. And in Greenwich they probably have a little more sunshine than is allowed to those who live under the denser smoke fall that hangs over the heart of the city! It is said that a

London bishop once became much interested in the religious condition of a distinguished Parsee who was at that time on a visit to the great metropolis. Meeting the Parsee one day the bishop ventured to express his regret that a gentleman of such intelligence, who had had such opportunities in travel for intercourse with learned men, could worship a created object, such as the sun. "Oh my Lord Bishop," answered the Parsee, "you should see it. You have no idea what a glorious thing it is!"

J. B. T. Marsh.



THOUGHTS AND OBSERVATIONS ON NATURAL HISTORY.

By H. B. M. BUCHANAN, B.A.

SOMEONE has said—who, I forget—"that for every ten men who can think, one man can speak; and that for every ten men who can speak, one man can see." Intelligent observation is the rarest of gifts. To observe and know something of the ever-changing sky over our heads; the bird that is flying in the blue expanse, with steadfast purpose, faster than any express train; the tree that clothes itself with the pure light-green of spring, to slowly change into the deeper and duller green of summer, and then to change again into all the various and glorious tints of autumn; the flower and weed that are beautiful by the wayside; the animals quietly eating the green grass, or resting lazily in the warm sunshine; the numberless insects that move in the summer air with rhythmical sound; the bit of human nature that stands by our side; to observe and know something of it all is to fill the measure of life with an interest and joy that will not waste. It would be wise, when we go for our walks and incursions into the country, to leave the business behind, the social worries and unkindnesses, the unsolved philosophical problem, and only to observe and talk about the endless things that on all sides are pleading for notice.

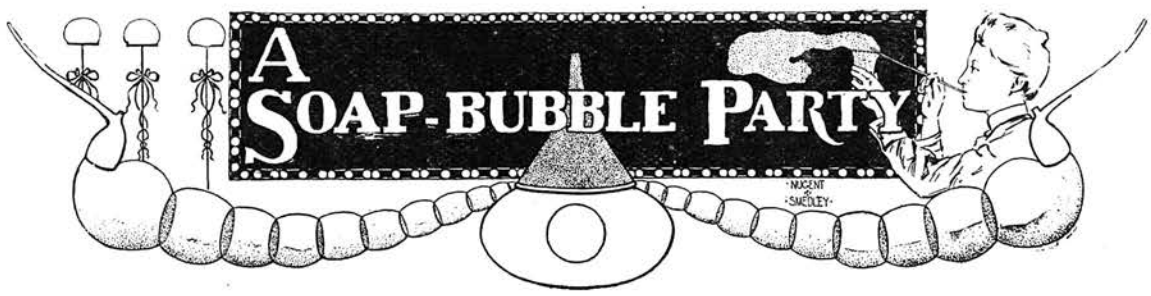
Seldom in the history of the English climate has the worker of the soil looked anxiously for a rain-cloud to appear on the horizon, and longed that it might gradually spread and deepen till it fell on the parched earth as rain. But so it has been this wonderful year, and the grumblers against the vileness of the English climate are compelled for once to cease their wailings. The leaf sprang from its winter's imprisonment fresher and more beautifully green than ever; the early spring flowers—violets, celandines, speedwell, ground-ivy, spurges—spread their yellow, blue, and white flowers with a reckless abundance. Week after week passed and no rain came, and yet the green kept its freshness and the wild flower did not fade; for in February a larger quantity of rain fell than usual, filling the rivers and wells and saturating the soil to a great depth, and so the tree's fibrous and spreading root could obtain in liquid form the food from the soil that it required for a long, dry spell.

It was a lovely day this early spring. The sun was warm, the air still and fresh, and the sky an expanse of soft blue. I was walking along one of the beautiful Surrey lanes; the dog-mercury, violet, yellow celandine, and ground-ivy brighten up the foot of the wayside; but as yet the hedges hardly gave a sign of the glorious foliage of a few weeks later, when up got a flock of peewits and a flock of starlings—they are often found together at this time of the year—and in two distinct and compact bodies flew round and round in perfect order, the united swish, swish of the peewits' wings breaking on the still spring air with deep regularity. Away they flew, now turning to the right, now turning to the left, with perfect precision, as if under a word of command; sometimes the starlings in front, sometimes the peewits, flying further and further away, till they disappeared, as two tiny specks, in the distance of the blue heaven. It was a very beautiful flight, and I do not think that I shall ever forget it.

The ways and doings of the starlings I love to watch. One day I went out in my garden with the intention of writing, but my attention was arrested by the quaint movements of two starlings. They had just found a suitable place for their nest under the roof, and they did not seem able to contain themselves for joy at their discovery. One of the birds kept popping into the nest and then on to the roof, flapping his wings, snapping his beak loudly, and imitating in turn a blackbird, tit, and chaffinch, cocking his head first on one side and then on the other, as if quite conscious that he was a very funny bird; then he flew from chimney to chimney in chase of his mate, then popped into the place that he had found for a nest, then on to the roof, and repeated this very funny performance again and again. Save a dog who has lost his master, and found him again before time has dimmed his devotion, I have never seen a greater exhibition of gladness. The very sight of it made me the happier.

Starlings are very sociable birds; directly they have finished with their young they collect in flocks. In fenny countries, such as Lincolnshire, they collect not in flocks, but in clouds. A single flock will consist of countless thousands, quite darkening the sky; and they seem to move under a guiding spirit, as they now wheel to the right and now wheel to the left, now advancing, now retiring, then by suddenly changing their course and presenting only their wings to the spectator they become almost invisible. The beautiful colour of the bird is not developed till it is three years old.

Owing to the great destruction of eggs and birds from various causes, it is necessary that birds should live a comparatively long time if the number of the species is to be kept constant. The mortality amongst the young is terrible. Certain eminent German scientists have calculated it like this:—Say, a certain species lives 10 years, and during that time lays 200 eggs—20 eggs a year; if the species is to remain constant in numbers, 198 out of that 200 must perish. Again, a golden eagle lives for 60 years, and lays 2 eggs each year; then in 50 years 100 eggs will be laid, but out of these 100 eggs only 2 will grow to adult birds, or, in other words, a pair of eagles will only bring 2 young eagles to maturity once in 50 years. Small singing-birds live from 8 to 18 years. Nightingales have lived 8 years in captivity, and blackbirds 12 years, but both will live longer in a natural state; canaries in captivity 12 to 15 years, ravens 100 years, magpies 20 years, parrots 100 years, fowls 20 years, golden pheasant 15 years, turkeys 16 years, pigeons 10 years. There is a fairly well-authenticated record of a cuckoo, which was recognised by a peculiarity in its note, that sang in the same place for 32 consecutive years. A golden eagle, which died in Vienna in the year 1719, had been captured 104 years previously. A falcon is said to have attained an age of 162 years. A white-headed vulture, which was taken in 1706, died in the Zoological Gardens at Vienna in 1824, thus living 118 years in captivity. Swans are said to have lived 300 years.



By Meredith Nugent.

ANYONE can perform the soap-bubble tricks that are here illustrated, by the exercise of a little care. There is no secret whatever connected with the making of the solution, as nothing is used in its preparation but soap and water. Care, however, must be taken to follow the directions here given to the smallest details. Most people, for instance, will insist upon stirring up the solution after the latter is in proper condition, in spite of repeated warnings that such action always prevents desirable results. Bear constantly in mind that, when once the soapy water is in proper condition, its surface must not be irritated into a thousand little bubbles, and you will be able to perform not only the bubble tricks here pictured, but many others as well.

TO MAKE A FLOWER INSIDE A BUBBLE.

FIG. I.

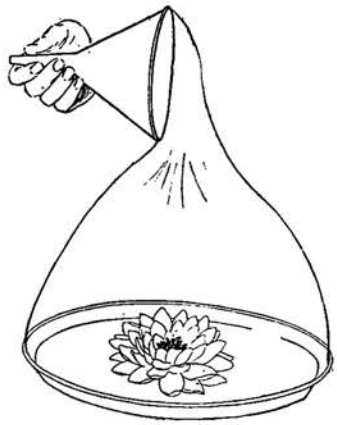
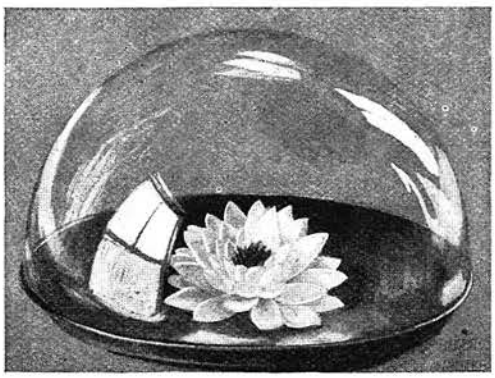


FIG. II.



FLOWER INSIDE A SOAP-BUBBLE.

In giving a soap-bubble party every effort should be made to provide appropriate settings for the bubbles. The more elegant and beautiful the settings, the more jewel-like the bubbles will appear. They look perfectly exquisite on delicate glassware and against rich backgrounds. Avoid, as far as possible, the use of white tablecloths, white plates, etc., as these reduce the beauty of the bubbles to a minimum. The table or tables should be decorated tastefully though brilliantly, and a chair provided for each guest. In front of each chair should be placed a bowl of the soapy solution, some straws, a funnel, a tin cornucopia, and other necessaries for the evening. Then, too, it is a good idea for anyone intending to give a soap-bubble party to practise the soap-bubble tricks previous to the night on which the entertainment is to be given, so as to be in a position to amuse the invited guests.

The chief bubble-blower should occupy a seat at the centre of the table, with a programme before him, while the other participants should follow his lead and do just as he does. In this way a lively competition is induced by the endeavours of each bubble-blower to outdo the others.

The solution is made by rubbing pure white Castile soap into a bowl partly filled with water until a heavy lather has formed. Then remove every particle of lather, dip a clay pipe into the cleared solution, and start to blow a bubble. If you can blow one six inches in diameter, the solution is ready for the test ; if it bursts before approaching that size, add more soap to the water. Then the solution should be tested as follows : Blow a bubble six inches in diameter so that it will hang suspended from the pipe, then dip your forefinger into the soapy water ; upon withdrawing it try to push it through into the

bubble ; if you can thrust your finger through into the bubble without the latter's bursting, the solution is in proper condition. If, on the contrary, the bubble breaks, the solution

RESTING UPON A FLOWER.

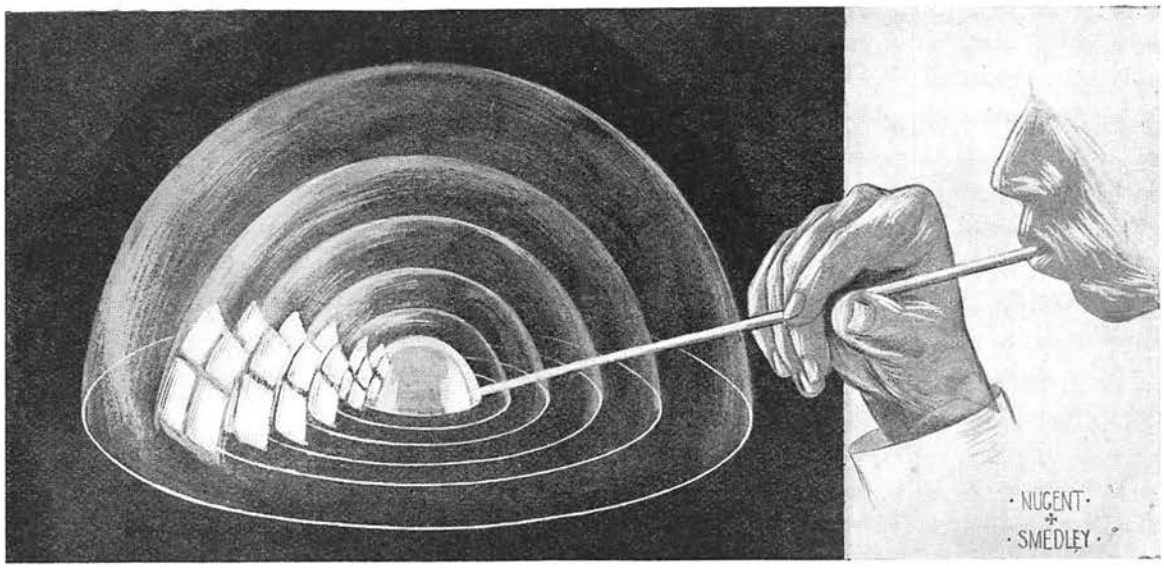
is not in proper condition, and more soap must be added to the water until a bubble can be made that will not break when this test is applied.

To make a flower inside of a bubble, pour the soapy solution into a plate or lacquer tray until the bottom is covered with liquid to the depth of one-eighth of an inch. In the centre of the tray place a water-lily or other flower, and over this a tin funnel. Then start to blow gently through the funnel while you are slowly lifting it at the same time (see Fig. I.). Continue blowing until you make quite a large film, and then proceed to disengage the funnel after having first turned it at right angles, as shown in Fig. II. Besides flowers, spinning-tops and other objects may be sphered over in the same way. This trick is one which always mystifies and delights small children, as well as older ones. The illustration given shows how the flower appears after the bubble is blown over it.

To make six bubbles inside of one another, dip the end of a straw in the soapy water, and after resting the wet end upon an inverted plate or sheet of glass, which should have been previously wet with the solution, blow a bubble about six inches in diameter. Then dip the straw well into the solution again, thrust it through into the centre of this first bubble, and blow another. Continue

MAKING BUBBLES AND NOISE.

in this manner until the bubbles have all been placed. Always be sure that the straw is thoroughly wet with solution for fully half its length before each bubble is blown. Ten



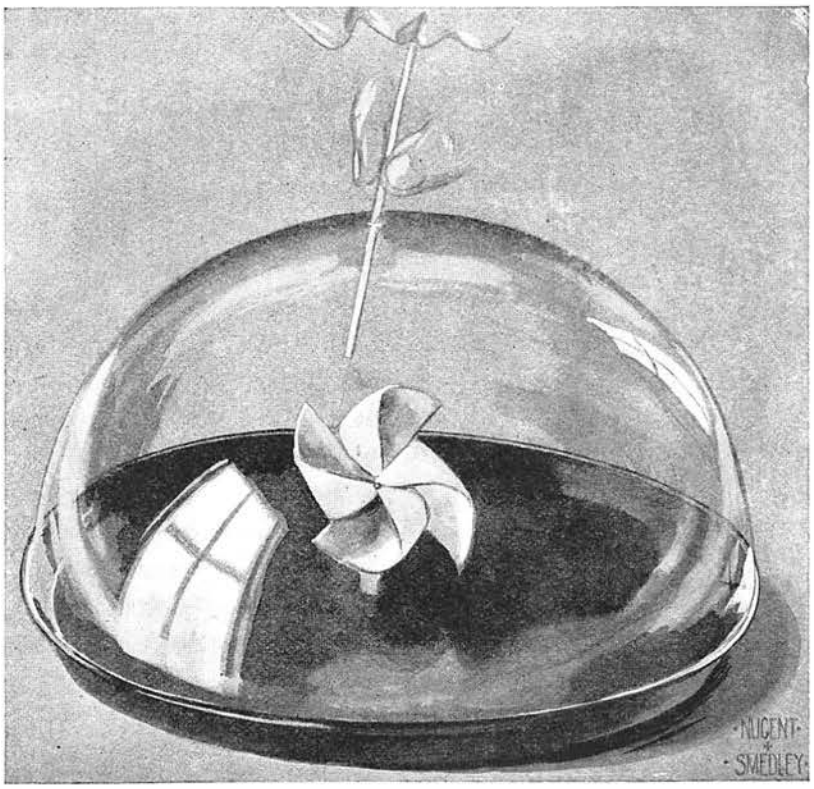
BLOWING SIX BUBBLES INSIDE OF ONE ANOTHER.

and even twelve bubbles may be placed inside of one another without great difficulty, if the person who is blowing them has a steady hand, and the solution is in proper condition. Of course, some practice is required before any of these results can be obtained.

To make bubbles and noise, dip the end of an ordinary tin fish-horn well into the solution and blow gently until quite a large bubble has been formed. Then four or five loud blasts may be sounded on the horn without injuring the bubble in the least. This is a very funny trick which never fails to arouse roars of laughter. The tin horn might be given to the youngest child in the room after the trick is performed.

To make a bubble rest upon a flower, dip a dahlia or other stiff-petalled flower —an aster of a brilliant colour, for instance—into the solution, and then with a pipe or funnel blow a bubble upon the top of it. This is one of the simplest and prettiest of all the soap-bubble tricks, although it appears the most difficult to those who are watching it being done. The illustration reproduced on the previous page gives a good idea of this flower trick.

To blow a pinwheel around inside a bubble, fasten a paper pinwheel to a short stick of wood, and attach this to the centre of a dinner-plate with sealing-wax; then, after covering the bottom of the plate with solution, proceed to place a bubble over the pinwheel as in the flower trick. As soon as the funnel is withdrawn, quickly dip a straw into the soapy water, gently thrust it through the bubble, and then blow upon the paper wheel, when it will rapidly revolve. This is rather a difficult trick, and a little practice will be



TO BLOW A PINWHEEL AROUND

required before it can be performed satisfactorily.

A little smoke-bubble may be made to appear within a large transparent bubble by blowing a fair-sized bubble from a clay pipe or small funnel so that it will hang suspended. Then dip a straw into the soapy water, push the wet end of it through into the hanging bubble, and blow very gently. Almost immediately a small bubble will fall from the straw, and as soon as this happens blow with slightly increased force, when the little bubble will whirl around and around inside of the larger bubble, as shown in the illustration. By blowing smoke through the straw a little smoke-bubble may be made, which will add a great deal to the effectiveness of this trick.

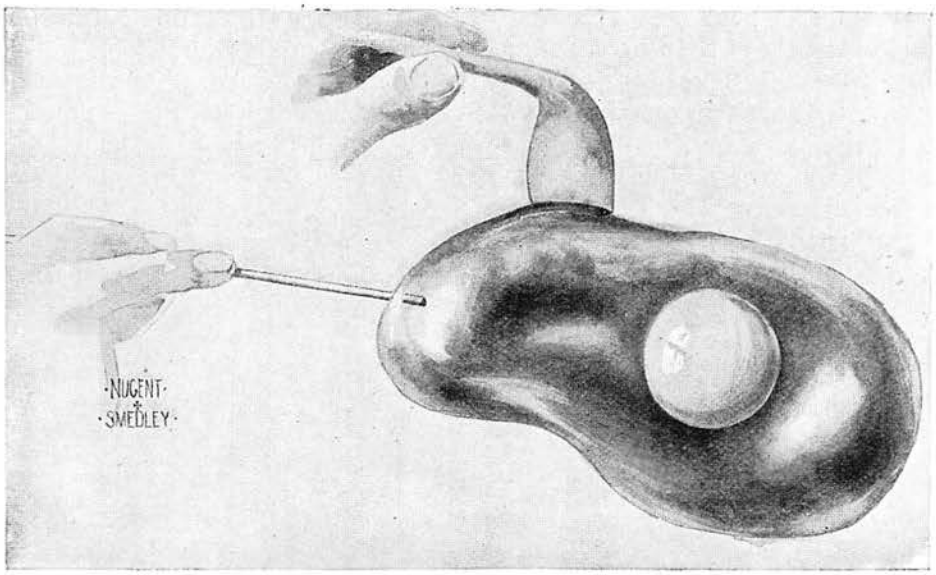
Remove all little bubbles from the surface of the solution before using it.

Never stir up the solution after it is in condition. If you do, little bubbles will form.

Take plenty of time in performing the different tricks. Hurry is nearly always disastrous.

Whenever convenient, use pure spring water for the solution.

Rub well the openings—inside and outside—of both pipes and funnels with soap before blowing bubbles from them.



BLOWING A LITTLE SMOKE BUBBLE.

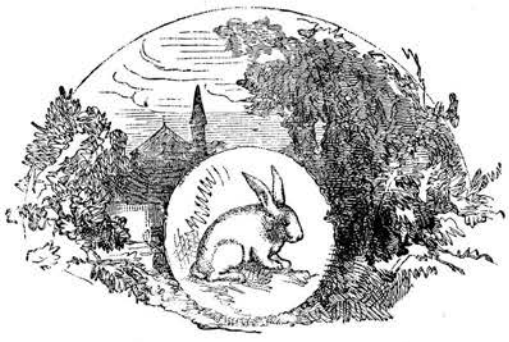
FALSE HAIR, AND WHERE IT COMES FROM.

A curious and amusing, and at the same time highly suggestive article, with the above title, was recently inserted in the *London Review*. We reproduce it here, with the omission of a small portion:—

"Of old a woman must have arrived at a certain age before her pride would permit her to don the regulation 'front' which at once placed her in the category of old women. Now Hebe herself is perfectly indifferent whether we know or not that she is indebted to other heads for her flowing locks. The consequence is that the trade in human hair has of late assumed very large proportions, and its value has increased at a prodigious rate. Where does it all come from? a spectator naturally asks, as he surveys the harvest of locks hanging in the windows of the fashionable hair-dressers, or disposed in every conceivable form on the heads of waxen dummies. And little does the spectator think of the Bluebeard's cupboard he is asking admittance to in putting this query. As a matter of course, all products required for the artificial decoration of the person find their way principally to Paris, and we accordingly find that city is the emporium of the trade in human hair. One hundred tons weight of this precious ornament is, we are informed, annually taken there, whence it is distributed in a raw and manufactured state over the whole of Europe. If we could watch in secret the rape of each lock, we should be able to give a series of pictures of human agony such as life but rarely presents, for we may be sure that, as a rule, a young woman would almost as soon lose her life as that glorious appendage, on which so much of her beauty depends. The collectors of hair on the Continent are generally peddlers, or persons moving about the country on some other business, to which they add the trade of hair purchasing. It is a singular fact that, heretofore, the agents employed in the collection of this precious material have generally been ostensibly employed in some other occupation. Arkwright, it will be remembered, did a little business in this line when travelling about the country collecting the spun yarn from the cottages; and, a few years since, the most extensive purchasers of hair abroad were a company of Dutch farmers, who supplemented their own business in this manner. Perhaps the trade would be considered too infamous to be openly practised; hence this convenient mask. In one department of France, however, there appears to have been no false shame on the part of the women with respect to parting with their hair, and this for a very obvious reason. The peasant girls of Brittany cover the head with a picturesque white cap, which wholly hides the hair; hence, from this quarter, the sale of the article has been for a long time openly carried on. Mr. Francis Trollope, in his 'Summer in Brittany,' published a few years since, describes a most amusing scene at a fair in Collenee, where, he says, he saw several hair-dealers shearing the peasant girls like so many sheep. A crowd of fair Brittonnese surrounded each operator, and, as fast as he sheared, he threw the long hair, tied up into a wisp, in a basket beside him. Whilst he was operating on one, the other girls stood waiting for their turn with their caps in their hands. The fashion which enforces the wearing of these close caps of course rendered these damsels callous to the loss of their hair, for which they generally got but a few sous, or a bright-colored cotton handkerchief. We have no doubt that even the simple Brittonnese have by this time become awake to the increased value of the article they have to sell, and that silk has taken the place of cotton in the exchange. Spain and the north of Italy also furnish considerable contributions to the collectors of these jet-black locks. The main crops of the golden hair, now so much prized, come from Germany, and the yellow hair from Holland. Is the glorious golden hair that the Venetian school of painters loved to depict still in existence? If so, we should recommend some adventurous traveller in this line to journey southward, as some profit may be made out of the article, which is now selling at a famine price. In all Catholic countries one great

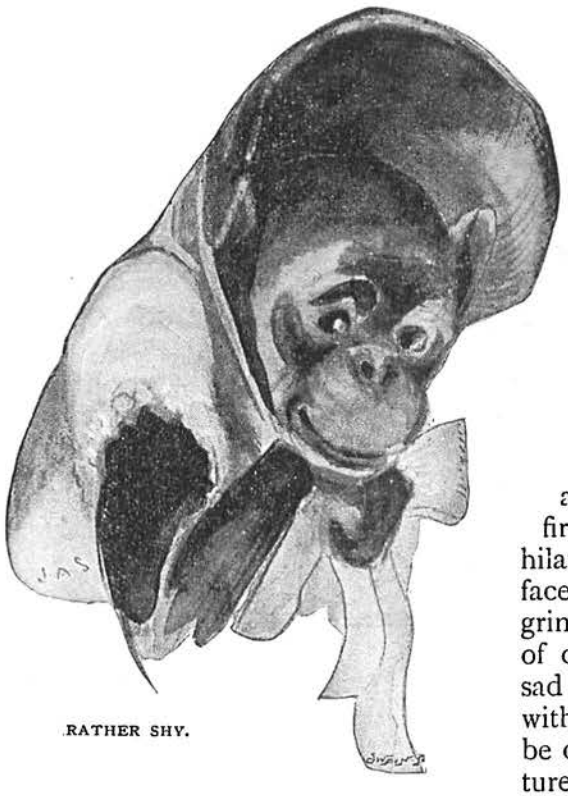
source of supply is the convent. The splendid tresses the devotee dedicates to God somehow get back into the world again, and are offered up at the shrine of vanity. This hair is known in the trade as church hair. In visiting a wholesale hair warehouse and manufactory lately we were shown some of these vestal tresses fresh from an English convent. Vanity of vanities—its next appearance, in all probability, will be on the head of some maiden of Belgravia, deftly woven with her own in order to enslave some eligible elder son. Hair-merchants, by long experience, have acquired great proficiency in judging of the nationality of this article. One of the largest dealers in the trade informed us that he could tell in the dark the nationality of any piece of hair. This is done either by the sense of touch or smell. Some nations have much coarser hair than others; indeed, there is a constant difference both with respect to length and weight. The average weight of a French head of hair (by which is meant the piece of long hair which forms the knot at the back of the head) is five ounces; of Italian, six ounces; of German, ten. This difference has much to do with its color. A German, with the painstaking characteristic of his nation, has gone to the trouble of counting each individual hair in heads of four different colors. In that of a blonde he found 140,000 hairs; in a brown, 109,440; in a black, 102,962; and in a red one, 88,740. Thus there are nearly twice as many hairs in the blonde tress as in the red, which accounts for its superior flossy silkiness and greater weight. To see a hair-merchant take up a long tress, sniff a long sniff, and say at once where it came from, is as refreshing as to see a wine-taster deciding a particular vintage of wine by its bouquet. It is possible the chemical constituents of the material in some measure lead him to a conclusion, as there is always found to be an excess of sulphur and oxygen in fair hair, and an excess of carbon in black hair. Local odors, again, are great tell-tales of the parts from which hair comes; thus, Irish hair is distinguishable among others by the smell of peat smoke always to be found in it; possibly Scotch hair, of the peasant class of course, may be distinguished from that of her sister across the channel by the delicate difference of this peat odor, just as we distinguish Irish from Scotch whiskey. But there are two or three sources from which hair is obtained which, perhaps, in a still stronger manner indicate the source from which it was last taken. The *chiffonniers* who go about in Paris, morning and evening, picking out prizes from the gutter, have not overlooked human hair. By their agency the combings of the fair Parisienne are returned once more to the human head; no doubt there is a dust-heap odor the hair merchant knows well. But there is still another kind of hair, about which there is a deep mystery. A grim smile passes over the features of the hair merchant, as he tells you that the long "leech" of hair (for that is the trade name for the small parcels in which they are done up for sale, after being prepared and cleansed) is known as churchyard hair! As he draws attention, with a certain subdued manner, to the squared end of the "leech," you perceive that they have not been cut, but pulled out of the head, with the bulb adherent; sometimes this class of hair comes to market with pieces of the scalp-skin at the end. How this hair is obtained is a mystery which the trade does not care to fathom. When we so often hear of the desecration of churchyards, and the shovelling away of the old bones and decayed coffins, we may, perhaps, make a shrewd guess at the source from which this hair comes. It must be remembered that hair is almost indestructible. The beautiful wig of auburn hair now in the British Museum, had lain in the tomb of a Theban mummy for upward of two thousand years before it found its way to the national collection, yet that hair is as fresh as though it had just come from the hands of the hair-dresser, and the curl is so strong in it that it cannot be taken out even by the application of heat. Churchyard hair is brought into the market by home as well as foreign collectors, and we cannot help suspecting that the gravedigger is no mean member of that craft. The Englishwoman very rarely sells her hair—she must be reduced to the last condition of poverty before she would consent to this sacrifice. But there is a class who are compelled to do so. There can be little doubt that the majority of the long English tresses come from the heads of criminals. It is a cruel and a brutal thing to do—the ostensible reason is cleanliness—but an enforced cleanliness, bought at the expense of the last remnant of self-respect left to the woman, and a cleanliness the more rigorously looked to because its results form

the perquisite of the warders. They are never obtained without oaths, prayers, and blasphemous imprecations upon the despoilers. Fever, also, places his contributions in the hands of the hair merchant; and there is a sad suspicion that the mysterious woman that hovers about the house of the dead to perform its last offices, does not, when an opportunity offers, allow it to escape. There are still other resources from which human hair is obtained, of a yet more repulsive nature; but we have said enough to show that when a lady buys false locks she little knows the curious and mysterious tale each individual hair possibly could tell her. Indeed, such is the demand for gray hair that we are obliged to rob goats and the mohair sheep to eke out our own scanty stores. Raw hair comes from abroad in bales tied up in "leeches," and containing hairs of various lengths. The first step in its preparation is to cleanse it of its oily matter. This is done by rubbing it in fine sand, which completely absorbs all the fatty matter it contains. It is then carded by hand, the workman throwing the lock of hair with great rapidity over the iron teeth of the card, and speedily reducing it to a regular smoothness. The next step in the process is to select from the different "leeches" the different lengths of hair they contain; these lengths are then matched with others; and in this manner the "leech," as it is offered for sale, is perhaps the product of a dozen heads. The manufacturer has two markets to supply—the demand for simple uncurled locks for the purpose of plaiting, etc., with the natural hair, and curled hair, for the needs of the wig and front makers, and for the thousand and one fashionings in which hair-dressers now tempt our blooming belles. The curl is permanently fixed by twisting the hair tightly round small cylinders of wood, and then boiling them for a considerable time in water. At Messrs. Hovenden's, the largest hair merchants perhaps in London, we saw thousands of these cylinders slowly drying, representing in value a very large sum of money. The value of hair depends so much upon whose hands it is in, and the progressive stage at which it has arrived, that in this particular we can only liken it to the ascending value of iron, from its raw condition of pig up to its most perfect and expensive form —watchsprings. One thing is certain, the original possessor parts with it for a mere nothing. As we have seen, the peasant woman of France sells her back hair for a few pence; when it passes out of the hands of the collectors, it has risen from four shillings to thirty shillings per pound for average qualities. But the rarer kinds, both in color, quality, and length, are so valuable that they are sold even by the hair merchants by the ounce. The longer the hair is, the more valuable, other conditions being equal. Messrs. Hovenden exhibited, in the feathers and fur department of the Great Exhibition of 1862, a head of hair which measured upwards of two yards in length. It was from the head of an English lady, and it must have trailed upon the ground when she was standing up, even if she had been a very tall woman. As a rule, the greatest demand is for the medium brown colors, and for the obvious reason that that is the prevailing color of England. But the precious colors are bright golden and white hair. We scarcely need look into the fashionable hair-dressers' windows to perceive that fair golden hair is now the rage. As very few persons, however, possess just the true tint, the true opalescent gold which changes with every motion of the head—the color, in short, which is the ideal of the poet—ladies are given to bleach their hair down to the required tone, and to mix, we may say flavor, their tresses with the precious hair. This golden hair is now selling at the rate of from 12*s*. to 15*s*. the ounce, or at about three times the price of silver. But there is a rarer hair still. Youth and beauty in the race of vanity are outstripped by age. Gray hair is in such demand that, as we have before said, we are obliged to eke out our stores by resorting to mohair. Fine gray hair is now sold for a guinea an ounce, mainly for the purposes of the perukier. As soon as the precious material falls into the hands of this amiable functionary, art claims it for its own, and the price ascends to fabulous heights.



XXIII.—
ZIG-ZAG SIMIAN.

WHENCE has arisen the notion that monkeys are happy creatures? Probably from the inadequate fact that they pull one another's tails and run away. But a being may be mischievous without being happy. Many mischievous boys are never happy: possibly because the laws of Nature won't permit of half the mischief they are anxious to accomplish. Still, the monkey, at any rate in a state of freedom, is looked upon as a typically happy creature. "And watch the gay monkey on high," says



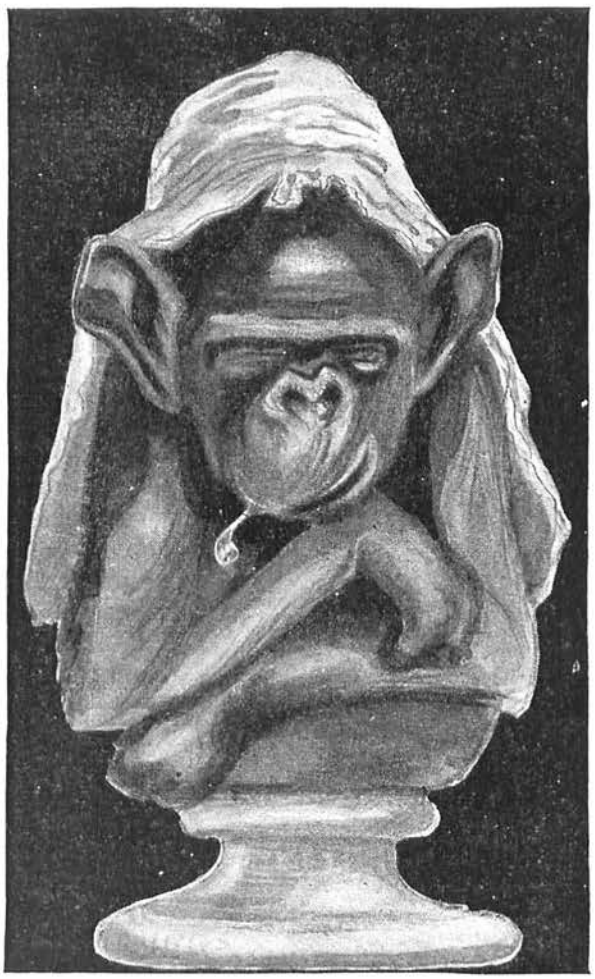
RATHER SHY.

Bret Harte; and Mr. Kipling addresses the monkey as "a gleesome, fleasome thou," which latter looks like an attempt to make an admissible adjective pass in an unwarranted brother. I have seen monkeys fleasome, treesome, freesome, keysome (opposite adjectives these, you will perceive on reflection), and disagreesome, but cannot call to mind one that looked in the least gleesome. Everything that runs up a fence or swings on a rope is not necessarily jolly, much as the action would appear to justify the belief. Many a human creature has stormed a fence with a lively desire to attain the dogless side, but no noticeable amount of jollity; and a man escaping from fire by a rope wastes no time in unseasonable hilarity, dangle he never so quaintly. Look at their faces; look also at the monkey's face. If a monkey grin, it is with rage; his more ordinary expression of countenance is one of melancholy reflection—of sad anxiety. His most waggish tricks are performed with an air of hopeless dejection. Now, this may be due to any one of three causes, or even to a mixture of them. It may be that, like the boy, he dolorously reflects that, after all, mischief has its limits; that you cannot, so to speak, snatch the wig of the man in the moon, upset the Milky Way, or pull the tail of the Great Bear. Or it may be that a constant life of practical jokes, and of watchfulness to avert them, is a wearying and a saddening thing after all. Or it may be that every ape, meditating on his latest iniquity, tries for ever to look as though it were the other monkey.

With many people, to speak of the Zoo monkeys is to speak of Sally. Poor Sally! Who would not weep for Sally? For Sally is dead and hath not left her peer. A perversion of Milton is excusable in the circumstances. Why is there no memorial of Sally? "Is the spot marked with no colossal bust?" as they say on invitations to bachelor small-hour revels. There should, at least, be a memorial inscription to Sally.

Sally, when first she came here in 1883, was a modest and, indeed, rather a shy chimpanzee. A few years of elementary education, however, quite changed Sally's character, for she learnt to count up to five, and to be rather impudent. Wonderfully uniform are the results of elementary education.

The chimpanzees, orang-outangs, and such near relatives of humanity are kept, when they are alive to keep, in the sloths' house. Such as are there chiefly occupy their time in dying. It seems to be the only really serious pursuit they ever take to. Sudden death is so popular among them,



SALLY ON A BUST.

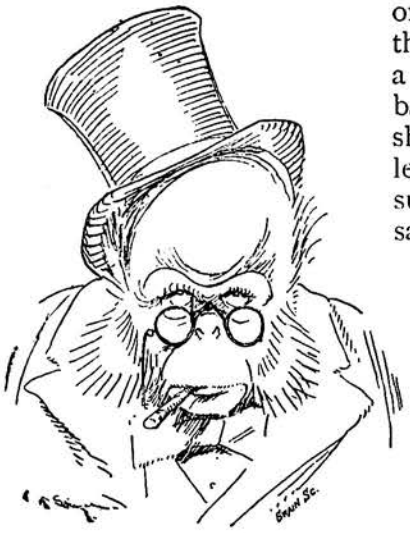
that it is quite impossible to know how many are there at any particular time without having them all under the eye at the moment. A favourite "sell" among them is for a chimpanzee or orang to become a little educated and interesting, then wait till some regular visitor invites all his friends to inspect the phenomenon, and die just before they arrive at the door. This appears to be considered a most amusing practical joke by the dead monkey, and is much persevered in.

Sally was a black-faced chimpanzee. The white-faced kind is more common, and in the days of its extreme youth much more like a stage Irishman, except that his black hair gives him the appearance of wearing dress trousers very much frayed at the ankles.

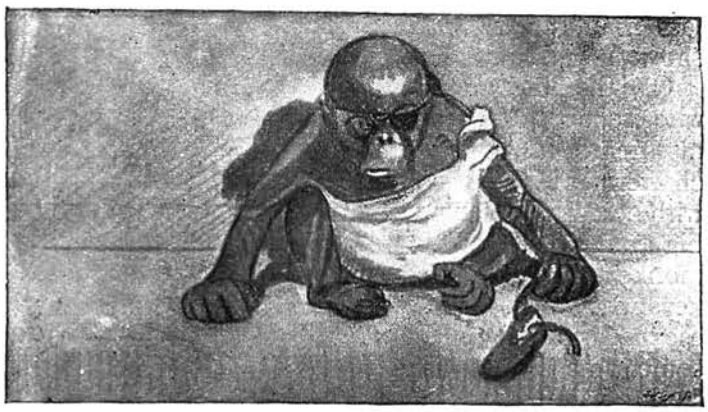
The orang-outang is less intellectual as a rule than the chimpanzee; but he has a deceptive appearance of brain-pan — an illusory height of forehead—that earns undeserved respect.

A STAGE IRISHMAN.

Many a man has conducted a successful business with credit on the strength of a reputation as easily earned. With the orang as with the chimpanzee, it is in infancy that he presents the most decently human appearance. But even then he is a low, blackguard sort of baby—worse than the precocious baby of the Bab Ballad could possibly have been. He should have a pipe for a feeding-bottle and a betting-book to learn his letters from. These anthropoid apes come with such suddenness and die with such uncertainty that I cannot say whether there are any in the Zoo now or not—I haven't been there since yesterday. But wanderoos there are, I feel safe in saying, and Gibbons. The wanderoo is a pretty monkey, and usually gentle. He has a grave, learned, and reverend aspect as viewed from the front, and this is doubtless why, in India, his is supposed to be a higher caste, respected and feared by other monkeys. That same wig, however, that looks so venerable in the forefront view, is but a slatternly tangle in profile, like unto the *chevelure* of a dowdy kitchenmaid. But a wanderoo, well taught, and of good-temper, is as clean and quaint a pet as you may desire, and as delicate as the poet's gazelle, with its incurable habit of dying. The same may be said of the Gibbon. In this climate he Declines and Falls



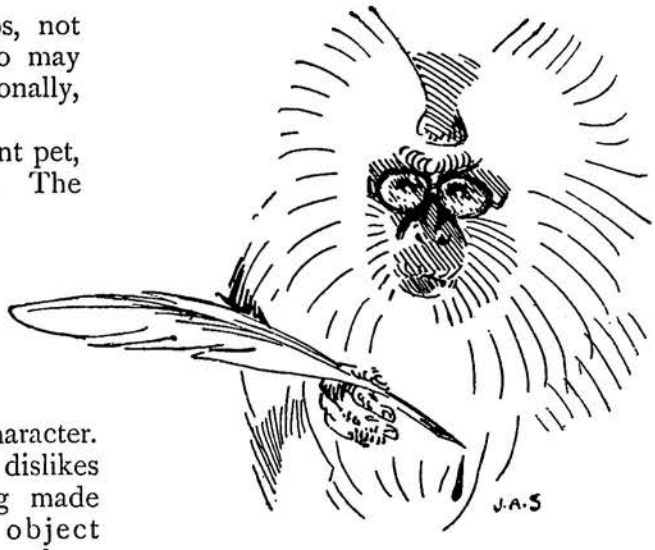
A DECEPTIVE BRAIN-PAN.



WHAT WILL HE BECOME?

on the smallest excuse, although, perhaps, not quite so readily as the chimpanzee, who may almost be said to Decline and Fall professionally, like Mr. Wegg.

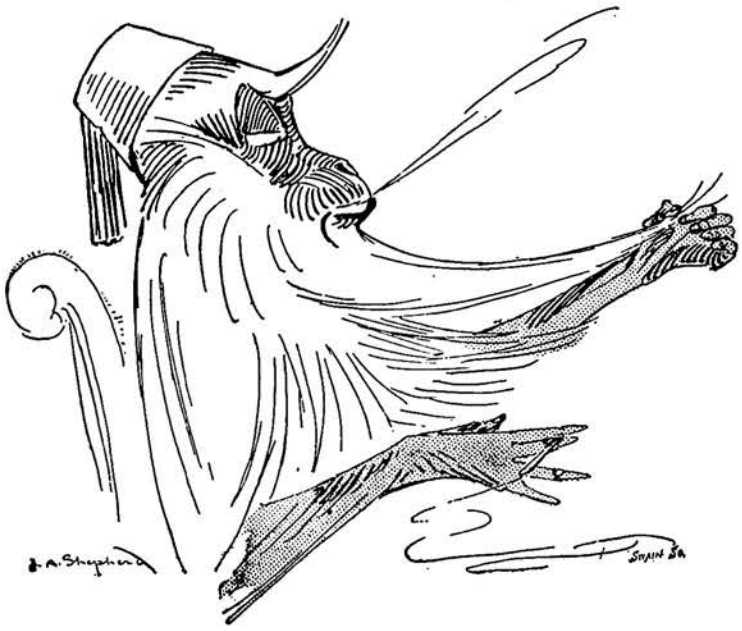
The Diana monkey, too, makes a pleasant pet, and is not so confirmed a dier as some. The Diana monkey here is over in the large monkey-house, in the middle of the Gardens. Her name is Jessie, and her beard is most venerable and patriarchal. But just outside the eastern door of the big house, John, the Tcheli monkey, occupies his separate mansion. John is a notable and a choleric character. He dislikes being made the object of vulgar curiosity, and is apt to repel an inspection of his premises with a handful of sawdust. Any unflattering remark on his personal appearance will provoke a wild dance about his cage and a threatening spar through the wires. But once threaten him with a policeman—do as much as mention the word, in fact—and John becomes a furious Bedlamite, with the activity of a cracker and the intentions of dynamite. Against floor, walls, ceiling, and wires he bounces incontinent, flinging sawdust and language that Professor Garner would probably translate with hyphens and asterisks. John is the most easily provoked monkey I know, and the quaintest in his rage. He is also the hardiest monkey in the world, being capable of enjoying a temperature of ten degrees below zero; but there is a suitable penalty provided in the by-laws for any person so lost to decency as to suggest that this Tcheli monkey is a very Tcheli monkey indeed. For John's benefit I would suggest an extra heap of sawdust on Bank Holidays. On an occasion of that sort it is little less than cruelty to keep him short of ammunition.



GRAVE AND LEARNED.

DOWDY.

Of the big monkey-house, who remembers more than a nightmare of tails, paws, and chatterings? Here are monkeys with beards, monkeys with none, big monkeys, little monkeys, monkeys with blue faces, monkeys who would appear to have escaped into the grounds at some time and to have sat on freshly painted seats; all thieving from visitors and each other,



THE DIANA.

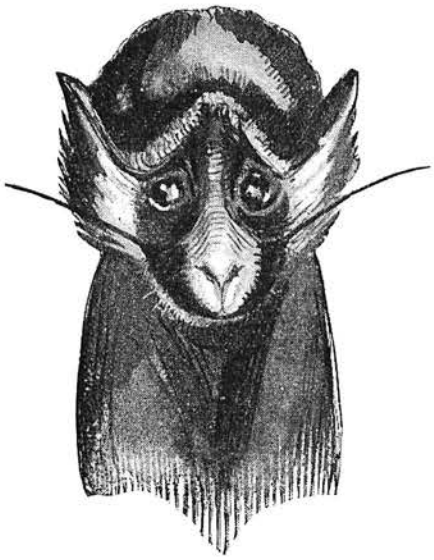
IS IT CONSCIENTIOUSNESS ?

preparing to laugh; consequently, I must pull that tail, though I would prefer to stay where I am, especially as it belongs to a big monkey, who will do something unpleasant if he catches me." And with an inward groan he executes the time-honoured joke and bolts for his life. It is a sad affliction to be born a wag by virtue of species. There is one monkey here who for some weeks displayed a most astonishing reluctance to snatch things through the wires, and a total disinclination to assist or share in the thefts of his friends by "passing on" or dividing. For some time I supposed him to be a moral monkey strayed from a Sunday-school book, and afflicted with an uncomfortable virtue. But afterwards I found that his conscientiousness was wholly due to his having recently grabbed a cigar by the hot end, and imbibed thereby a suspicion of the temperature of everything. Beware especially, in this house, of the paws of Marie, the Barbary ape. She has a long reach, and quickness enough to catch a bullet shot Poole-fashion — softly. Only Jungbluth, her keeper, can venture on familiarities, and him she takes by the eyebrows, gently stroking and smoothing them.

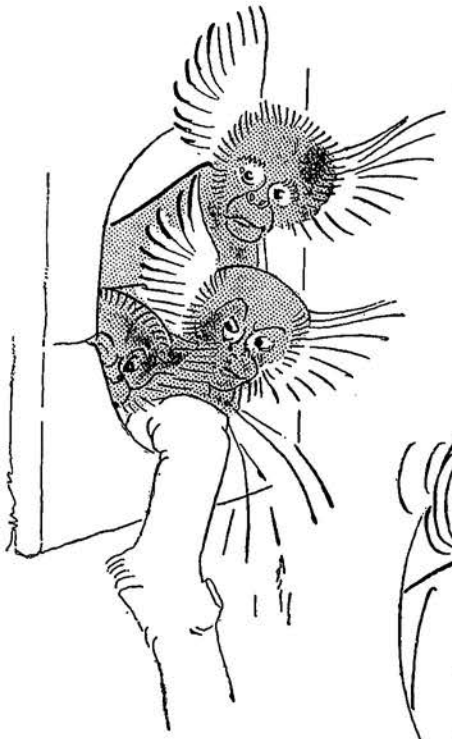
NERVES.

Behind the large room Jungbluth keeps sick monkeys, delicate monkeys, tiny monkeys, and curious monkeys, who have no room outside. Here is a beautiful moustache monkey, segregated because of a slight cold, and at liberty to train his moustache without interference, if only it would grow sufficiently long. Watch the light fur under the chin of a moustache monkey; it is tinted with a delicate cobalt blue, a colour that would seem impossible, except in feathers.

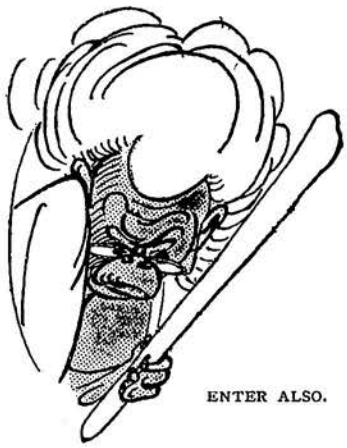
But the little marmosets and the Pinche monkey, all in a cage together, are chiefly interesting here. The pulling tails, swinging, turning somersaults, with faces expressive of unutterable dolor and weariness of the world. The wizen, careworn face of the average monkey appeals to me as does that of the elderly and rheumatic circus-clown, when his paint has washed off. The monkey, I am convinced, is as sick of his regulation jokes as is the clown of his. But he has a comic reputation to keep up, and he does it, though every mechanical joke is a weariness and a sorrow to the flesh. "There is somebody's tail hanging from a perch," reflects the monkey, looking lugubriously across the cage. "I am a joker, and several human creatures are looking at me, and



SOMETHING LIKE A MOUSTACHE.



ENTER.



ENTER ALSO.

Pinche monkey is badly afflicted with nerves, and, as he is undisputed chief of the community, the marmosets have to be careful how they sneeze, or cough, or blink, or his indignation may be aroused. So that the whole performance in this cage is a sort of eccentric knockabout act, by the celebrated Marmosetti Eccentric Quartette. Marmoset No. 1 ventures on a gentle twitter, and the rest join in the song. Promptly the irritated Pinche bounds from his inmost lair, and the songsters are scattered. Everybody doesn't know, by-the-bye, that the marmoset is consumed with an eternal ambition to be a singing bird, and practises his notes with hopeless perseverance. Another thing that many seem to be ignorant of, even some who keep marmosets as pets, is that a marmoset's chief food should consist of insects. In a state of freedom he also eats small birds; but for a pet, cockroaches and bluebottles will probably be found, as a dietary, preferable in some respects to humming-birds and canaries.

THE MARMOSETTI TROUP.

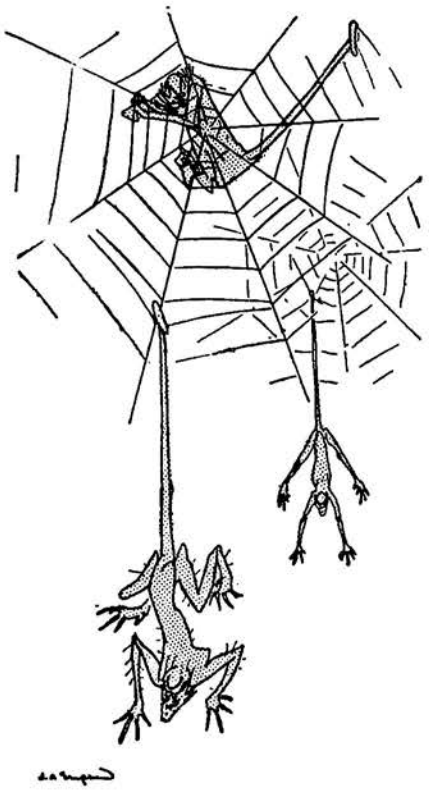
EXIT.

SOLILOQUY.

Among the sick in this place is a spider monkey. Mind, I say he *is* there. To-morrow, or in five minutes, he will probably be somewhere else, for that is the nature of a monkey. Sickening, recovering, dying, snatching, jumping, tail-pulling, bonnet-despoiling, everything a monkey does is done in a hurry. This particular spider monkey has two or three names, as Jerry, Tops, and Billy, whereunto he answers

COINCIDENCE.

indifferently; but I prefer to call him Coincidence, because of his long arms, and he answers as well to that name as to another. He came in here because of a severe attack of horizontal bar in the stomach. I have never seen a monkey fall, and, for that reason, wish I had seen the attack, as a curiosity. For, by some accident, unparalleled in monkey history, Coincidence managed to miss his hold, and fell on his digestive department across a perch. He is a long, thread-papery sort of monkey, and it took a little time to convince him that he wasn't broken in half. When at last he understood that there was still only one of him, he set himself to such a doleful groaning and rubbing and turning up of the eyes, that Jungbluth put him on the sick list at once. But it took a very few hours to make him forget his troubles; and, indeed, I have some suspicion that the whole thing was a dodge to secure a comfortable holiday in hospital. That certainly is the opinion of Coincidence's friend, the Negro monkey, as his face will tell you, if you but ask him the question. It may interest those who already know that Coincidence has a long arm, to know also that he has but four fingers to each hand and no thumb; it is a part of his system. His tail is another part of his system, and you mustn't touch it. There is no more affable and friendly monkey alive than Coincidence, although he is a little timid; but once touch his tail (it is long, like everything else belonging to Coincidence), and you lose his friendship for ever. He instantly complains to Jungbluth, and points you out unmistakably for expulsion.

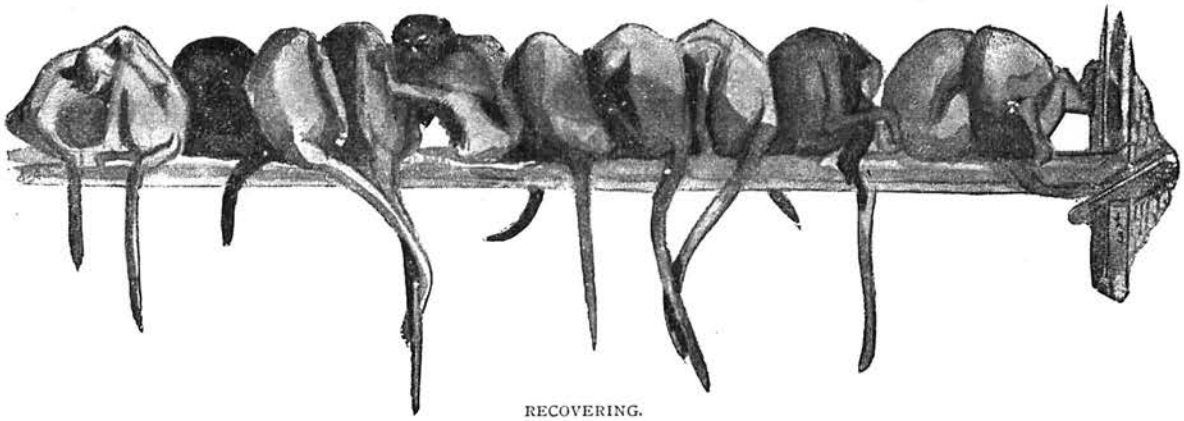


SPIDERS.

ON THE SICK LIST.

It is this house that witnesses most excitement on Bank Holidays. Who would be a monkey in a cage set in the midst of a Bank Holiday crowd? I wouldn't, certainly, if there were a respectable situation available as a slug in some distant flower-pot, or a lobster at the bottom of the sea. Is a monkey

"COINCIDENCE? HE'S ALL RIGHT."



RECOVERING.

morally responsible for anything he may do under the provocation of a Bank Holiday crowd? Is he not rather justified in the possession of all the bonnets and ostrich feathers he can grab by way of solatium? Bank Holiday is the *dies iræ* of these monkeys, and then is Professor Garner avenged. The Professor shut himself in an aluminium cage, and the cage littered about Africa for some time, an object of interest to independent monkeys—a sort of free freak show. Here the monkeys, secure in *their* cage, study the exterior freaks, collecting specimens of their plumage, whiskers, spectacles, and back hair. But it is hard work—and savage.

DIES IRÆ.

It takes even a cageful of monkeys a few days to recover from a Bank Holiday, and for those few days trade is slack indeed. At such times it is possible to observe the singular natural phenomenon of a monkey in a state of comparative rest. But he is more doleful than ever.

BERRY SHORT-CAKES.

THE SEVERAL WAYS OF MAKING AND SERVING.

OW that the berry season is once more here, nothing is more delicious for dessert or supper than a fine strawberry short-cake. I will append several recipes for the making of this favorite dish, and while they all differ, each has been declared perfect of its kind by those who have eaten them. For the short-cake, make a biscuit dough with one quart of flour (sifted twice) with three teaspoonfuls of baking-powder; then rub three tablespoonfuls of butter or lard until it feels like coarse sand; now quickly add milk, or milk and water enough to make a dough as soft as can be rolled out. If lard is used, add a small teaspoonful of salt. Handle as little as possible after adding the milk.

Short-Cake No. 1.

Roll the biscuit dough out until about *half an inch* thick. Lay a jelly-cake tin over it and with a sharp knife cut around it so it will be the right size, then flour the tin and bake in a hot oven; it should be done in ten minutes. Butter the bottom of the cake and use it for the top. Cut the berries in half, putting the cut side next the cake; when every part is covered, with a dredge box sift thickly with powdered sugar, then put another layer of cake on and cover with berries and sugar in the same manner. There should be two layers in each cake, but the quantity of dough given bakes four layers, or two cakes, to be sent to the table with one of the following four sauces, which, for convenience, I will call one, two, three, four:

Sauce Number One.—Whip a pint of well sweetened cream until stiff and like a sponge, with any good egg-beater. When ready to serve the short-cake, moisten it with a little sweetened cream or milk—just four or five tablespoonfuls—and then heap over each portion about three tablespoonfuls of the whipped cream. It looks, as it tastes, appetizing and delicious. There will be no trouble in whipping the cream if it is of good quality and you take the precaution of putting it on the ice to thoroughly chill it. If the cake is put on the table whole to be dished there, send the whipped cream with it in a fancy pitcher.

Sauce Number Two makes still another dish of the short-cake. Put over one pint of milk to scald, and two tablespoonfuls of granulated sugar; when at the scalding point add one well beaten egg and one-half a teaspoonful of vanilla. Take off the stove immediately, for if the egg boils it will curdle; if, however, it hasn't thickened the milk any, put it back on the stove and bring to the boiling point again. When cold it should be about as thick as good cream, and smooth. Send in a pitcher to the table to be poured over the short-cake after dishing it.

Sauce Number Three.—One cupful of powdered sugar and one tablespoonful of butter, beaten together to a cream; then beat one whole egg,—beat the white first until stiff, then add the yolk to it,—and after thoroughly beating the two together, add to the creamed butter and sugar, then add one-half a cupful of milk, a little at a time, beating hard all the while. When done it should look like a yellow cream. It looks very handsome on the short-cake.

Sauce Number Four is made like *Number Three*, using only the white of the egg and adding a cupful of mashed strawberries, making a pink sauce.

Short-Cake No. 2.

Make the dough like No. 1, baking in a dripping-pan in one large cake. When done it should be nearly two inches thick; then while warm cut in squares with a very sharp knife which you warm and hold perpendicularly so the cake will not be heavy where it is cut; split each square in half and butter the inside, then, putting the crust side down, cover the top with berries which have been thoroughly crushed and sweetened. Cover with the other half, putting the crust side next the berries, and the soft inside on top; cover this with a liberal supply of the crushed berries, allowing some to run over the sides.

This is the *genuine, old-fashioned* short-cake, so dear to many hearts, and is often preferred as it gives the full flavor of the berry. A very nice addition to this is a tablespoonful of *Sauce Number Three*, the yellow sauce looking very pretty with the crushed berries gleaming through.

Short-Cake No. 3.

Make some puff paste, using eight ounces of butter to a pound of flour. (As the process of making has before been described in these pages I will not repeat it here.) Cut in pieces with a square or round cutter, and bake. When cold cover with berries and sift powdered sugar over, then put another layer of the puff-paste cake and another of berries, two layers in all, and over each one a spoonful of *Sauce Number One* the whipped cream.

Short-Cake No. 4.

For those who prefer sweet cake for the berries, make a sponge cake batter with one cupful of sugar, one cupful of flour and three eggs, a piece of soda the size of a pea dissolved in a teaspoonful of boiling water. Beat the yolks until they froth, then mix with the sugar. Next add the whites beaten to a stiff froth, and last the flour and soda. Bake on two jelly-cake tins, and when cold put the berries between, rolled in powdered sugar.

Any of the above cakes can be eaten warm if preferred, but are all especially nice cold. After strawberries are gone, those who like raspberries can make them into short-cake in the same manner. Later on a short-cake of huckleberries is in order, or, to give it its proper name, a "Black Republican," is very fine.

"Black Republican" (Huckleberry Short-Cake).

Bake in a dripping-pan, like strawberry *Short-Cake No. 2*, and pour over it, when about to send to table, a quart of huckleberries that have been stewed on the stove with a cupful of water and a heaping cupful of sugar fifteen minutes. To be eaten hot.

Next in season is

Peach Short-Cake.

Make and bake like strawberry *Short-Cake No. 1*, then slice peaches as for the table, and cover with powdered sugar on each layer. Eat with the whipped cream sauce.

Blackberries are better made in pies and puddings.

—*Emma Keeler.*

NORTH WOODS SUCCOTASH.

Take a sturdy iron pot,
  Slice some fat salt pork to line it;
Pour a little water in
  Just for gravy to refine it.

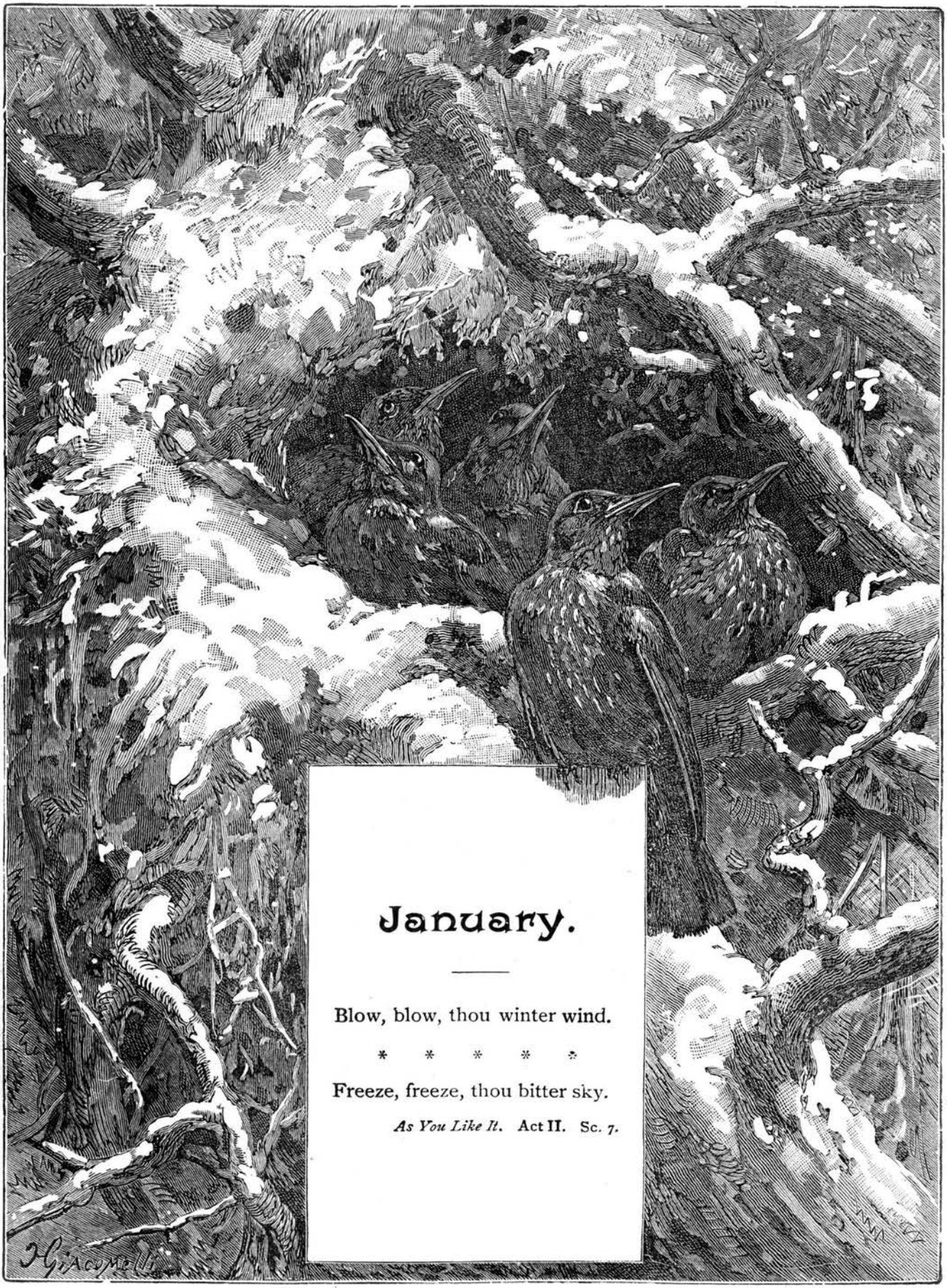
Turn your sweet corn in and cook
  Just an hour and season lightly;
Butter, salt and pepper add,
  Just to make the flavor sprightly.

Boil some tender garden beans
  Through and through—be sure you do it.
By this time the corn is fine;
  Stir the well-cooked beans into it.

Put more salt and pepper in,
  Butter just to give a flavor;
Cover up with pork and cook
  One-half hour to give the savor.

Turn out hot and full of juice,
  And no doubt 'twill meet your wishes.
This is what we eat in camp,—
  One of Adirondacks' dishes.

—*Florence E. Pratt.*



Logan's Home Manual, 1899

Create the Perfect Valentine with Our Image Collection of Romantic Victorian Couples!

victorianvoices.net/clipart/people/couples.shtml