

hold taking their meals together was abrogated. Domestic followers and retainers came to be looked upon as servants, and were treated as strangers to the family. They were limited to certain hours for their meals, and these hours were not allowed to interfere with those of their masters. Hence, it became necessary to prepare two sets of meals in every household where there were servants—one for the latter and one for the family. This lies at the root of the modern late hours.

FRENCH RAREBIT.—An old cook, a Frenchman, who says that he recently tasted Welsh rarebit for the first time in Philadelphia, gives the following receipt for making French rarebit, which he thinks will be found a great deal better than the Welsh: Take three ounces of cheese, cut it in small square pieces, and set it to fry with a little butter. When your cheese begins to melt have three eggs beaten up with salt and pepper. Pour them upon your cheese. Stir and roll it into a sort of muff, and take it off. The whole operation should not take more than one or two minutes.

THE "LONG MAN" OF WILMINGTON.—The figure of a man, 230 feet long, traces on the side of Wilmington-hill, which attracts so much attention on the South Coast line of railway leading to Hastings, has now had its outline completely restored. The figure is of great antiquity, but its date, origin, or purpose cannot be traced. Hilbert the outline has been marked by simply cutting the turf away and exposing the chalk beneath, but it is now shown by the insertion of white bricks in the space, thus preventing the lines from becoming obliterated. The "Long Man," as it is locally termed, is represented as holding a staff in each hand, the distance between them being 119 feet. The Duke of Devonshire, on whose ground the figure is delineated, has greatly assisted the work just completed.

WISELY SAID.—In domestic rule, said an observer of human nature, esteem is more potent than indulgence or even forbearance. When boys or girls go wrong, a very frequent cause is that they are not esteemed at home, or fancy they are not. This esteem must be genuine; it cannot be pretended or counterfeited. Hence in a governing person there are few qualities so valuable as readiness to appreciate merits, or ingenuity in discovering them, especially the latter. In every large family or small circle of friends there is generally some very difficult person to understand. This person is often exceedingly troublesome, and to use a common expression, very "trying." His or her merits (for he or she is sure to have some) have not been found out. Find them out and appreciate them; a great deal of the trouble of dealing with that person will be removed. The value of imagination in domestic government is very great. If we could have statistics on the subject, we should find, I think, that the children of unimaginative people are particularly prone to go wrong.

A CAUTION.—Brothers are privileged characters, and if they choose to take the trouble to interest themselves in the habits and ideas of their sisters they inevitably teach them a great deal which it is good for every girl to know. Sisters who have brothers older than they are, as a general rule, very circumspect in their deportment. In hours of pleasant confidence they have heard the frailties of their young lady friends discussed in a manner which puts them upon their guard. Husbands tell their wives almost everything; brothers confide a great deal in their sisters, and between the two some of us get to be very wise. A kiss or caress permitted as a sacred thing on the part of some innocent young miss is quietly discussed in these confidential chats in a manner that might surprise her considerably, and convince her that mamma was right after all. This is a delicate subject, but it is one of great importance, and we commend all young ladies to submit gracefully to the guardianship of fathers and elder brothers until a nearer than either claims the right to protect them. So far from considering occasional words of admonition and careful watchfulness tyrannical, or a vexatious restraint, let them be grateful for the wise discipline which preserves them pure in heart and "above suspicion."

DON'T QUARREL.—People talk of lovers' quarrels as rather pleasant episodes. Probably because they are not quarrels at all. She pouts; he kisses. He frowns; she coaxes. It is half play, and they know it. Matrimonial quarrels are another thing. I doubt seriously if married people ever truly forgive each other after the first falling out. They gloss it over; they kiss and make it up; the wound apparently heals, but only as some of those horrible wounds given in battle do, to break out again at some unexpected moment. The man who has sneered and said cruel things to a sensitive woman never has her whole heart again. The woman who has uttered bitter reproaches to a man can never be taken to his bosom with the same tenderness as before those words were spoken. The two people who must never quarrel are husband and wife. One may fall out with kinsmen, and make up, and be friends again. The tie of blood is a strong one, and affection may return after it has flown away; but love once banished is a dead and buried thing. The heart may ache, but it is with hopelessness. It may be impossible to love any one else, but it is more impossible to restore the old idol to its empty niche. For a word or two, for a sharpening of the wits, for a moment's self assertion, two people have often been made miserable for life. For whatever there may be before, there are no lovers' quarrels after marriage.

SCIENTIFIC AND USEFUL.

FLANNEL.—Scald flannel before you make it up, as it shrinks in the first washing. Much of the shrinking arises from there being too much soap, and the water being too cool. Never use soda for flannels.

CLEANING PAINT.—To clean paint, smear it over with whiting, mixed to the consistency of common paste in warm water. Rub the surface to be cleaned briskly, and wash off with pure cold water. Grease spots will in this way be almost instantly removed, as well as other marks, and the paint will retain its brilliancy and beauty unimpaired.

SHANK-BONE JELLY FOR INFANTS.—Boil quickly four shanks of mutton in a quart of water for half an hour, then throw the water away, and boil the shanks again very slowly in a quart of water for six or eight hours till it is reduced to half a pint. It will then be a stiff jelly. When wanted, put a piece the size of a walnut into the food of the infant.

The White Star line of mail-steamers lays claim to two of the fastest passages on record between Queenstown and Sandy Hook and Sandy Hook and Queenstown respectively. The *Adriatic* sailed in May, 1873, and accomplished the voyage in 7 days, 23 hours, 17 min.; the *Baltic* sailed in January 1873, and accomplished the voyage in 7 days, 20 hours, 9 min.

USEFUL PERFUME.—A very pleasant perfume, and also a preventive against moths, may be made of the following ingredients:—Take of cloves, caraway seeds, nutmeg, mace, cinnamon, and Tonquin beans, of each one ounce; then add as much Florentine orrisroot as will equal the other ingredients put together. Grind the whole well to powder, and then put it in little bags among clothes, &c.

SCORCHED LINEN.—To restore scorched linen, take two onions, peel and slice them, and extract the juice by squeezing or pounding. Then cut up half an ounce of white soap, and two ounces of fuller's earth; mix with them the onion juice, and half a pint of vinegar. Boil this composition well, and spread it, when cool, over the scorched part of the linen, leaving it to dry thereon. Afterwards wash out the linen.

Nothing can convey a more impressive idea of the powers of water as a general agent than the wonderful canons of Mexico, Texas, and the Rocky Mountains, where the torrent may be seen rushing along, through the incision it has cut for itself in the hard rock, at a depth of several thousand feet, between perpendicular walls. The greatest of these canons, that of Colorado, is 298 miles in length, and its sides rise perpendicularly to a height of 5,000 ft. or 6,000 ft.

In the city of New York there is a daily delivery of nearly 200,000 letters and papers. The work is said to be severe on the health of those employed, owing to the constant walking up and down stairs. In some districts, in the lower part of the city, the carriers travel more miles under the roofs than they do on the highways. The *New York Times* states that in summer the letter-carriers often make the tour of an entire block on the roofs, visiting a house by way of the "scoutle." Up one house full of offices and down the next would greatly shorten a postman's beat.

SEEKING WITHOUT EYES seems not to be impossible, although our optics are usually considered essential to sight. At a recent meeting of a medical society in Pennsylvania the case was reported of a little girl, nine years old, in good general health, but having a falling of the upper eyelids, so as to completely close both eyes. Yet she was able to see well with the eyes closed and heavily bandaged, so that apparently the light was wholly excluded. The case has elicited much interest, and would scarcely be credited, except for the high standing of the medical gentleman making the report.

WASTE scraps of leather, horn, feathers, sponges, and wool, having been partially dissolved in caustic soda, and then mixed with slake lime and distilled in iron retorts, give off a plentiful quantity of ammonia. M. L. l'Hote proposes to pass the ammonia gas into receivers containing chamber acid, and thus form an impure ammoniac sulphate. By raising the heat at the close of the operation to a red heat, nothing will be left in the retort but sodic carbonate and quicklime. The addition of water converts these into caustic soda and calcic carbonate.

GOING TO BED.—We should never go to bed with a hope for rest, sleep, and perfect repose until "all is ready." The preliminaries for retirement are all just as important as are those for the day's duties. We must not go to bed with an overloaded stomach, in an anxious or troubled state of mind, with cold extremities, or without anticipating and responding to the call of nature in all respects. Standing before a fire is not the best way to get warm for a night's sleep. We should take such vigorous exercise as will give quick circulation to the blood, and not depend on artificial, but on natural heat. Attention to all these things should be followed by such devotional exercises as will bring all the feelings, emotion and sentiments into accord with the Divine will, subduing passion, removing hatred, malice, jealousy, revenge, and opening the portals of heaven to all who seek rest, peace, and sweet repose.

REMOVING SNOW FROM ROADWAYS.—A rather roundabout method of accomplishing this is patented by a Mr. Hart, who proposes a small locomotive engine, which is surrounded at the sides by a casing, with inclined endless belts with buckets, which take up the snow from rotating brushes or wings and convey it

over connecting chutes to a separate tank, where the snow is melted by steam connecting pipes and the direct application of heat. The different parts which come in contact with the snow are heated by steam from the boiler, to prevent the clogging of the machine and insure a rapid delivery of the snow to the tank. We hardly expect Mr. Hart's plan to supersede the regular snow-plow on long lines, or to successfully compete with the system of laying down steam pipes, on short ones.

We live in an age of inventions, and in spite of what has been accomplished in past periods, it seems we have not reached the ultimatum of man's powers; intellect is not, therefore, decaying. A new engine has been constructed, the novelty being that it emits no smoke nor steam and makes little noise. The engine used steam at 500 lbs. to the square inch, and maintained this pressure by natural draught without any difficulty; in fact, it worked half the time with the draught doors closed. The engine is compound, and expands the steam to the most economical limits, and then condenses it by means of two air surface condensers placed on either side of the machine. The boiler was inspected by the Belgian Government engineers, and proved by them of 2,800 lbs. water pressure per square inch, and pronounced a perfect piece of work. The engine can be driven from either end, all the driving gear being duplicate to obviate the necessity of turn-tables. The engine accomplished a speed of fifteen miles per hour, drawing its full load up gradients varying from one in 200 to one in 80, and was pronounced by all to be a machine likely to work a complete revolution in the use of steam. The system has been applied to stationary and marine engines, and the Yorkshire Engine company having the sole use of the patents, will, no doubt, soon do a large business in these machines. It is constructed by the Yorkshire Engine Co. on Perkin's system.

M. MICHEL has just described to the Academy of Sciences an apparatus of his invention for recording automatically the vicinity of an iceberg. The recent loss of the "Europe," said to have encountered a block of ice, led this gentleman to consider whether there might not be some reliable way of avoiding such contingencies, which are well known to be most frequent in the present season, when detached icebergs come down in shoals from the North Pole, and are a real danger to ships plying between Europe and North America. In the daytime those huge masses are seen from enormous distances when there is no fog, and when the sun shines upon them; they are then easily avoided. But in the vicinity of Newfoundland, where fogs are so intense as to require constant ringing of the bell and even firing of guns to avoid collisions in a sea literally swarming with ships, other means must be employed to ascertain the vicinity of an iceberg. This is always accompanied by a great fall in the temperature of the water within a very extensive radius, and it is on this circumstance M. Michel founds his plan, which consists in having a bi-metallic helicoid thermometer fixed to the side of the ships. When the temperature of the sea falls below a certain limit, the needle that marks the degrees is stopped by striking against a small metallic screw, whereby an electric current is instantly closed, causing a bell to ring, which will at once warn the officer on duty.

HOW TO SHARPEN A SCREWDRIVER.—The screwdriver is found not only in the tool-chest of every mechanic, but in most houses, and in not a few offices. It ranks with the hammer, the saw and the axe, in general utility, and yet very few persons know anything about how it should be sharpened so as to do its work most efficiently; that is, with the least expenditure of power, and the least injury to the heads of the screws.

In driving a screw into wood, the force used to press the screwdriver against the head of the screw tends to aid the latter in penetrating the wood, but when we attempt to extract a screw, every pound of pressure that we apply tends to render it more difficult to get the screw out. It therefore becomes very important that the screwdriver should be so formed that it may be kept in the nick of the screw by the exertion of the very least degree of force; for if it has any tendency to slip out, we can keep it in place only by applying pressure, in which case we run great risk of injuring the nick and rendering it impossible to draw the screw.

If we examine a screwdriver in the condition in which it is ordinarily found, we shall find that it presents a section in which the sides of the wedge, in which all screwdrivers terminate, are curves with the convex sides outwards. Now, the effect of thus curving the sides of this wedge, is to render it greatly more obtuse. Moreover, when we turn the screwdriver, the tendency to slip out of the nick is just in proportion to the obtuseness or bluntness of the wedge, and therefore this form is the very worst that can be chosen. In the hands of most good workmen, therefore, we find that the screwdriver ends in a wedge of which the sides are perfectly straight. This is a very good form, but is not equal to a form in which the sides of the wedge are curves, but with the concave sides turned outwards. In this way we lessen the obtuseness of the wedge at the extreme point, and produce a turnscrew which may be kept in the nick by the least possible pressure endwise. To grind a screwdriver into this form, it is necessary to use a very small grindstone, and many of the artificial stones found in market answer admirably. Many mechanics would find it to their advantage to keep one of these small grindstones for the purpose, as it could be run in the lathe with very little trouble.

HOUSEHOLD RECEIPTS.

WHITE KID GLOVES.—Cream of tartar rubbed upon soiled white kid gloves cleanses them well.

GRASS IN WALKS.—Water the gravel walks with boiling water, as it effectually kills the grass.

KID BOOTS.—A mixture of oil and ink is a good thing to clean kid boots with; the first softens and the last blackens them.

DOUGHNUTS.—One egg, one cup of sugar, two cups sour milk, one spoonful of cream if the milk is not very rich, one teaspoonful of soda, little salt, nutmeg, flour enough to roll.

BAKED INDIAN PUDDING.—Four eggs, one quart of sweet milk, five large teaspoonfuls of Indian meal, nutmeg and sugar to the taste. Boil the milk and scald the Indian meal in it, then let it cool before adding the eggs. Bake three-quarters of an hour. Eat with butter or sweet sauce.

MUTTON CHOPS FOR INVALIDS OR DELICATE CHILDREN.—Nicely trimmed mutton chops, put in a covered jar, with a little water, pepper and salt, and cooked in a slow oven for three hours, form excellent food for an invalid or a delicate child, as the meat is not so hard as in the ordinary way of cooking.

GINGER LEMONADE.—Boil twelve pounds and a half of lump sugar for twenty minutes in ten gallons of water; clear it with the whites of four eggs. Bruise half a pound of common ginger, boil with the liquor, and then pour it upon ten lemons pared. When quite cold, put it into a cask, with two tablespoonfuls of yeast, the lemons sliced, and half an ounce of isinglass. Bung up the cask the next day; it will be ready in a fortnight, and will prove a most refreshing beverage.

QUEEN'S PUDDING.—Butter a basin or mould well, and stick it all over with raisins. Put layers of bread and butter, with 3 oz. of bitter and sweet almonds mixed, blanched and cut into shreds, 3 oz. of candied or orange-peel cut thin, the peel of a lemon grated, sugar to your taste, four well beaten eggs, and a pint of milk. Fill the basin with layers of bread and butter, with the almonds on the raisins; then mix the milk, eggs, and sugar, pour it in, cover the mould closely over, and boil it twenty minutes.

ICING FOR CAKE.—Whisk the whites of seven eggs until they stand alone, and are perfectly dry. Have ready sifted and pulverized one and a half pounds of the finest white sugar. Add one table-spoonful of this to the eggs at a time, beating continually until all is consumed. Add a tea-spoonful of any extract you fancy; rose, lemon, or vanilla is best. If properly beaten, the icing will hardly run at all, and will dry in a few hours in a warm place. Dissolve a very little gum-arabic or gum-tragacanth, and add to prevent the icing from peeling off the cake when out, as it would otherwise do.

STEWED BEEF STEAKS.—Cut the steaks a little thicker than for broiling. Dissolve some butter in a stewpan, and brown the steaks on both sides, moving it often that it may not burn; then shake in a little flour, and when it is colored pour in gradually sufficient water to cover the meat well. As soon as it boils, season with salt, remove the scum, slice in onion, carrot, and turnip; add a bunch of sweet herbs, and stew the steak very softly for about two hours. A quarter of an hour before it is served, stir into the gravy two or three teaspoonfuls of rice flour, mixed with cayenne, half a wine-glass of mushroom ketchup, and a little seasoning of spice.

TO STEW SMOKED BEEF.—The dried beef, for this purpose, must be fresh and of the very best quality. Cut it (or rather shave it) into very thin small slices, with as little fat as possible. Put the beef into a skillet, and fill up with boiling water. Cover it, and let it soak or steep till the water is cold. Then drain off that water, and pour on some more; but merely enough to cover the clipped beef, which you may season with a little pepper. Set it over the fire, and (keeping on the cover) let it stew for a quarter of an hour. Then roll a few bits of butter in a little flour, and add it to the beef, with the yolk of one or two beaten eggs. Let it stew five minutes longer. Take it up on a hot dish, and send it to table.

When Governor Marcy was Secretary of State at Washington, a person whose duty it was to receive callers on the Secretary and introduce them, in the discharge of his duties one day could not find the Secretary in his office. After looking in vain for him, he rushed frantically up to an individual who he supposed would be able to inform him, and, striking an attitude, exclaimed, "That Marcy I to others show, that Marcy show to me!" A happy application of a similar quotation was once made by Mrs. Harriet Beecher Stowe. Some years ago, while passing up the Mersey to Liverpool, looking overboard, she observed the muddy character of the river, and remarked to a friend standing at her side, "The quality of Mersey is not strained."

A FRENCH gentleman, having received direct from Martinique a small box of coffee, invited some friends to dinner, solely with the object of letting them taste the infusion of the famous berries. On the renowned coffee being served, every one was delighted with its delicacy and aroma. "Ah, my friends," cried the host, "what a fortunate country is Martinique! A soil which can produce a beverage like this must indeed be blessed!" At this moment the footman entered the room. "Excuse me, sir," said he to his master, "but cook wishes me to say that, as you forgot to let him have the coffee for this evening, he sent for half-a-pound to the grocer's." Tableau!