WATER THROUGH LEADEN PIPES.—On an analysis of some water from one of the departments of the Royal Establishments, at Windsor, being made, it was found that in the first sample, which was taken from the pure spring, the water was perfectly free from any trace of lead. This spring, being at some considerable distance from the place where it is required, viz., the kennel of her Majesty's hounds, it is conveyed thence through pipes of lead; on the second sample (mind, taken from the pipes!) being submitted to analysis, the quantity of lead contained therein amounted to 1-312 grs, or approaching 1½ grs. of carbonate of lead to the imperial gallon of water; there can, therefore, be but strong grounds for presuming that the disease called kennel lameness in sporting phraseology, and which now rages amongst the hounds there, is caused by the quantity of lead taken into the stomach of the poor animals; and what gives us a greater desire to promote some attention to the subject is the fact that, not only the canine race, but the human also are sufferers, as in more than one case a species of paralysis, and effects similar to the painter's colic, has attacked the attendants at the kennel.

kennel.

COPPER POISON occurs from the use of copper saucepans imperfectly tinned. If they be put away damp, or if a boiling-copper be left wet, they will become coated with poisonous crust, or verdigris. Several instances are related of whole families being poisoned by partaking of made-dishes allowed to stand and get cold in copper vessels. It appears that the acid contained in stews, as lemon-juice, though it does not dissolve copper by being merely boiled in it a few minutes, nevertheless, if allowed to cool and stand in it for sometime, will acquire a sensible impregnation of poisonous matter, as verdigris, or the green band which lines the interior of the vessel. In preparing food or preserves in copper, it is not till the fluid ceases to cover the metal, and is reduced in temperature, that the solution of the metal begins. Unctuous or greasy solutions are, however, most liable to become thus impregnated with verdigris. Sir Humphry Davy asserts that weak solutions of common salt, such as are daily made by adding a little salt to boiling vegetables and other catables in our kitchens, act powerfully on copper vessels, although strongones do not affect them.

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catables in our kitchens, act powerfully on copper vessels, although strong ones do not affect them.

ZINC MILK VESSELS.—The following shows the danger and the folly of the practice of keeping milk in zinc bowls—a custom which has lately become very prevalent: these articles being sold with the recommendation of a larger quantity of cream being produced, owing to the galvanic action. "I would scarcely have believed," says L. Elanes, of Berlin, "that zinc vessels would again have come into use for alimentary purposes, as Vauquelin, forty years ago, proved that such were certain, after a short time, to hold a certain quantity of zinc in solution. I have found by experiment, that a solution of sugar which had stood only a few hours in the summer in a zinc vessel, contained a considerable amount of zinc salts. It has often been stated that the cream will separate more easily from milk, if the latter be kept for a short time in a zinc vessel. As, however, it is known that milk will turn acid much sooner than a solution of sugar, it is the more to be apprehended that some zinc will be dissolved, and such zinc will be the more noxious, as it is well known that even a small amount of zinc will cause spasmodic romiting."—Pharmaceutical Journal.

GILT GINGKERERAD is poisonous, and children should be cautioned against eating the spurious gold; for it is nothing more than copper-plates with celamine, hammered out into leaves, in Germany, and sold very cheap in this country, under the name of Dutch gold, or Dutch metal. Common lozenges are freely adulterated with chalk, and coloured with poisonous substances. Last Twelfih Day, four children narrowly escaped poisoning, at Kensington, by eating the ornaments of a twelfih cake.

LUCIFER MATCHES should be kept out of the way of children, who have been known to eat the composition, from its sweet taste, and others to be poisoned by the phosphorus contained in it.

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COFFEE.—Chicory is detected by shaking the suspected article with cold water, in a glass vessel; if the coffee be pure it will swim and give little or no colour to the liquid, but if chicory be present it sinks to the bottom, and communicates a pretty deep red tint to the water. Roasted corn may be detected by adding tincture of iodine to a cold decoction of the suspected coffee, which will produce a blue colour in the liquid.

MUSTARD.—The inferior varieties of mustard are often composed, almost entirely, of flour, turmeric, ginger, and cayenne pepper. Turmeric is detected by a solution of potash, soda, or ammonia, which strikes a deep brown colour when the mustard is diffused in water. Flour is discovered by iodine, which when added to a decoction of mustard, gives it a deep blue colour. When the quantity of flour is large, it forms a tough paste with water.

SAUSAGES, made in a peculiar way, are much used in Wurtemberg. When ill prepared, they become poisonous, and their effects are invariably fatal. The patient gradually dries up into a sort of mummy, and, after weeks, or months of misery, he dies. But there is no poisonous substance to be detected in the sausage. It is, according to Professor Liebig, in a peculiar state of fermentation, which is not checked by the action of the stomach, and which is, unfortunately, communicated to the blood. It never ceases till every part capable of solution has been destroyed, and death, of course, must follow. But, as it appears that the poisonous sausages may be rendered quite safe by boiling, and by other simple means of arresting fermentation, we may hope that the true theory of the poison will lead to a successful treatment of this frightful accident, which, unhappily, is very frequent.

Fish Poison is rare, except when the mussel or the oyster is in an unhealthy state, or beginning

spirit very carelessly conducted, but it is often obtained from potatoes which are either rotten, or have begun to germinate.

VITRIOL ACCIDENTS are not uncommon in kitchens, as, when oil of vitriol (improperly used for cleaning copper vessels) is let fall upon the hands, &c. In this case, if a like sod or potash be dissolved in water, or some fresh soap-boilers' lees, and be instantly applied, no injury whatever

some fresh soap-bollers lees, and be instantly applied, no injury whatever will occur to the person or clothes.

Relief from Excessive Heat.—By placing a gas-light within the chimney, immediately over a fire-place, it will greatly tend to moderate the heat of the apartment. A lighted lamp suspended in the chimney will have a similar effect; and even a lighted candle set in the fire-place of a bed-room

a similar elect; and even a lighted candle set in the fire-place of a bed-room will render it more comfortable during hot weather.

Never enter a sick room in a state of perspiration, as the moment you become ecol, your pores absorb. Do not approach contagious diseases with an empty atomach, nor sit between the sick and the fire, because the heat attracts the thin vapour.

RECENT DOMESTIC INVENTIONS.

THE AMERICAN FIRE-PLACE, is stated to save room and fuel, to furnish a

THE AMERICAN FIRE-PLACE, is stated to save room and fuel, to furnish a convenient apparatus for cooking, and to send hot air into the interior of a room, avoiding, at the same time, the steam usually arising from cooking stoves. The fire is kindled in a metal box constructed in the hearth; an air-chamber is made underneath the fire-box, and a metal plate rises perpendicularly behind it, so as to form a flue for carrying off the smoke. An opening is made in the box to admit fuel, and tubes are fixed in communication with it, to let heated air into the room. When employed for cooking, the utensils must be placed upon the top plate of the fire box, in which holes are made for the purpose of emitting heat. The inventor considers that he combines the convenience and economy of a close stove, with the pure air and perfect ventilation attained by open fire grates.

SILVESTER'S IMPROVED OPEN FIRE GRATE, remedies the defect in grates commonly in use—of not affording sufficient warmth to the lower part of rooms. This is done by the fire heing made upon the floor, in front of which, in place of the hearth, are radiating bars confined by a semi-circular front: these bars become conductors of heat, and each bar being hollowed underneath, allows of the free passage of air; and the ashes fall into a recess truck under the partition bars forming the fire-place. The chimney, or fire-place opening, is made tight to the opening of the grate in front. The smoke is discharged vertically, and is screened in great measure by moveable shutters resting on centres at each end in a rack, so that the chimney opening may be adjusted in level and area at pleasure. The chamber part not occupied on each side behind the grate-front is closed at the upper part from any communication with the chimney. This portion of the fire-place recess being one to the room, the sides of the chimney and mass of heated matter of the body of the grate become an important additional warming surface. We have, therefore, in this grate, a warm hearth which does not

ars' use.
Burbidge and Healey's Sylvester Cooking Apparatus, is re-Burbinge and Healey's Sylvester Cooking Apparatus, is remarkable for its simplicity, little waste of fuel, and radiation of the heat. It comprises a boiler, oven, and open roasting bars, to which may be added saucepans, &c. When not wanted for roasting, the fire-place is shut up; and when not required at all for cooking, the doors of the fire-place, oven, and flue, are shut up, though the fuel in the fire-place keeps ignited, but burns no faster than in an Arnott stove; so that the ebullition of the boiler is kept under. An apparatus of the smallest size will roast a joint of twenty pounds; and the oven has a passage of air through it, so as to produce the difference between roasting and baking.

Bath Heated by Gas.—Dr. Fyfe suggests, that where a bath is required in a bed-room, it may easily be heated by gas, by attaching a flexible pipe to a tube in the room, so that it will supply from 30 to 40 feet of gas per hour; six rose-jet burners, with 16 holes each, will be sufficient. In his trials, Dr. Fyfe used a bath, in which were put 24 gallons of water at 50°; beneath the bath, and at a little distance from it, there was passed a tube of about two inches diameter, with six rose-jet burners attached to it. The gas was kindled, and in three quarters of an hour, the water was brought to 100°; gas consumed, 17 feet; cost, nearly two-pence.

JEFFRRY'S PNEUMATIC STOVE, projects boldly into the room, so as vastly to increase the field of radiation, instead of the fire being immured, and three-fourths of the heat lost up the chimney. This important point of bringing the fire forward, without risking the extrance of smoke into the room, is effected by tubes ranged behind the fire, and which, by communicating with an air-box below, throw into the room plenty of warm fresh air. The smoke current, passing through the intervals of the tubes, warms the air inside, and it is discharged into the room over the chimney-piece.

The LUTON STOVE, consists of one box or chamber enclosed within another; and the fuel being placed in the inner chamber, which has fire-bars at the bottom, the atmospheric air introduced from above, descends down, and the products of combustion pass away by side passages to the chimney. Heinke's (Arnott's) STOVE, costs but twopence per day for fuel, and when once charged, will not require any more attention for ten hours, as the stove regulates itself by the thermometer.

GREAN'S TERRA-COTTA STOVE, generally resembles Arnott's Thermometer Stove; but, in place of making the outside of the stove of iron, Mr. Green substitutes a cylinder of terra-cotta, or earthenware. Two or three consecutive cylinders of carthenware are also introduced between the fire-pot and the external case, so as to equalize the heat as much as possible, and prevent any danger of cracking the cuter case of the stove.

FIRE FROM STEAM-WARMING.—Mr G. Gurney states, from experiment, that steam under high pressure is partially decomposed, and that in a state of gaseous vapour, it is capable of heating the iron flues to such an extent that linen is charred, gunpowder fired, and metal fused by it. Mr. Gurney suggests the use of fusible metal in some part of the pipes, as a preventive of fire; for, melting when the flues become too highly heated, it will allow the escape of the vapour, and, of course, assist in cooling the pipes.

Cooking Br Gas was successfully practiced. S

A VERY SIMPLE KNIFE-CLEANER may be made of two boards, twenty inches long, six inches broad, and one inch thick, joined together, but not quite close, by a hinge; two pieces of buff or belt leather are stretched over the interior surfaces, and nailed on the exterior ones; and a handle assists in holding the apparatus steady. In using it, lay powdered Flanders brick, or any similar dust, on the lower leather; shut the boards together, lay the left arm on the upper board, holding the handle; put the knife, well wiped from grease, between the leathers, and four or five rubs backwards, not sideways, will produce a beautiful polish on both sides. The shoulders and back may be polished on the part of the leather turned over.

THE AMERICAN SCHUBRING-BRUSH is worked backwards and forwards by a lever, operating in the manner of a pump-handle. A flat board, on which the operator stands, is placed upon the floor on castors, and from this rise two uprights to sustain the pin that is the fulcrum of the lever. To the lower end of this lever, the scrubbing-brush is attached.

KALSOMINE, is a new and inodorous paint, invented by Miss Fanny Corbeaux. It is free from any offensive smell, dries in a few hours, and is said to be more durable than oil paint, more agreeable to the eye, and not prejudicial to the health: a room painted with it one day, may be inhabited the next. A VERY SIMPLE KNIFE-CLEANER may be made of two boards, twenty

NEW WATER COLOUR .- Alady at Palermo wishing to make a drawing of

NEW WATER COLOUR.—Alady at Palermo wishing to make a drawing of the beautiful Bourgainvilloa Spectabilis, was at a loss for a rose-colour that would match it. It struck her, however, that the juice of the Opuntia fruit would do, and upon trial she found it yield a most beautiful rose-colour, which was as readily worked as if it had been prepared in a colour-shop; and now, after a year, it is as fresh as ever. It would be worth while to get the Sicilians to make up the juice of the Opuntia into cakes.

Electro Gilding and Plating have already produced some very surprising results. "There is an establishment in London (Messrs, Elkington's) and we believe others, both in London and Birmingham, where a dazzling and brilliant assemblage of candelabra, candlesticks, tripods, salvers, cones, vases, cups, plates, and other articles of table furniture is to be seen, all coated with a surface of nure gold and silver by the electro process. There may be vases, cups, plates, and other articles of table furniture is to be seen, all coated with a surface of pure gold and silver by the electro process. There may be other instances more useful, but we doubt whether there is any more striking than this application of electricity. It is known that gold looks better when laid on silver than when on any other metal, and hence the value and beauty of 'silver-gilt' articles. The same, we believe, is true with regard to electro-gilding." The applications of the electro process to domestic manufactures are already very numerous; for, as things at present are, a person may, as Mr. Smee remarks, "enter a room by a door, having finger-plates of the most costly device, made by the agency of the electric fluid. The walls of the room may be covered with engravings, printed from plates originally etched by galvanism, and multiplied by the same fluid. The chimney-piece may be covered with ornaments made in a similar manner. At dinner, the plate may have devices given by electrotype engravings, and the salt-spoons gilt by the galvanic fluid.

SLATE FURNITURE.—The use of slate as a material for furniture has been

SLATE FURNITURE.—The use of slate as a material for furniture has been starts furniture has over recently introduced, and is increasing. Tables and sideboards, wash-hand stands, toilets, wine-coolers, filters, and any similar articles, are now made of this material. Slate is also manufactured into panels for doors, fingerplates, paper weights, inkstands, &c. It is susceptible of much ornament, and is found to bear colours and gilding remarkably well.

AMERICAN CLOCKS.—A correspondent of the Hartford Journal, from Bristol, writes: "The amount of capital employed in this branch alone is some three or four hundred thousand dollars, and the business gives employment to nearly four hundred mechanics. The manufacture of clocks has greatly increased within the last five years, although for fifteen years prior probably one million were made and profitably disposed of. We have every facility for manufacturing, and the vast improvements recently effected in machinery have done wonders for the business. The division of fabour is well understood, and carried out to a nicety, otherwise it would be impossible to manufacture and afford brass mahogany cased clocks for the low price of three, four, or five dollars each, which is now done. More than ten thousand have been sent to England alone within the last eighteen months." AMERICAN CLOCKS .- A correspondent of the Hartford Journal, from

HEATING BY GAS .- Sir John Robison devised a method of generating heat Heating by Gas.—Sir John Robison devised a method of generating heat by burning gas through a tube of about six inches diameter, open at the lower end, the top end being covered by wire-gauze, similar to that of the Davy safety-lamp. This process Sir John has used in his house for several years, successfully, as a substitute for coal. The wire gauze is liable to be destroyed under a long-continued intense heat; but this may be obvinted by sprinkling a small quantity of sand upon it. Yet, heating by gas is elsewhere stated by Sir John Robison to be most expensive, the least efficient, and with one exception, the most insalubrious mode of warming apartments that can be resorted to.

CHLORIDE OF LIME, moistened with water, and applied to ink-spots on silver, &c., will remove them far more effectually than "salt of lemons."

silver, &c., will remove them far more effectually than "salt of lemons."

A New Style of Paper-Hanging has been introduced at Liverpool, from Switzerland. The character of the design is Florentine; the ground-work is white satin; the walls are divided into compartments, by rich gold-coloured styles, representing intricate carving; the panels are niches, with drawings of deer, lions, swans, &c., each forming a complete picture in gorgeous gold borders, somewhat in the Louis Quatorze style; the alternate panels are filled with filagree work, interspersed with flowers and gems; and altogether of exquisite design and execution. An exceedingly rich border runs round the top and bottom of the room.

The Patent Relievo Leather Hangings, panels, imitative oak carving &c. are of heaviful design; indeed it is difficult to discover that some

THE PATENT RELIEVO LEATHER HANGINGS, panels, imitative oak carvings, &c. are of beautiful design; indeed, it is difficult to discover that some of the patterns are not carvings on wood—so closely imitated are the chisel mark, the grain of the wood, the undercutting, and its assimilation of colour, to the best oak and wahut carving of the Middle Ages. The haungings, friezes, heads, fruits, &c. in the various rich and elaborate styles fo decoration prevalent in Spain, Italy, France, and Germany, as well as our own "Elizabethan," are here deceptively imitated. The cost of these ornaments is about half the price of carvings in wood. Esquilant's leather architectural and other ornaments, as fruits and flowers, are prepared in metal moulds, and soaked in varnish, and then forebly cold-pressed into the mould.

VIGNOLES'S CARPET TAPESTRY, is made on the principle of the ancient mosaics, being composed of innumerable transverse sections of woollen threads. No painting, no colouring is used; all the effect is produced by ends of worsted about one-eighth of an inch long standing vertically, one end being seen, and the other cemented by Indian-vubber to a cloth. From the facility of reproduction, this fabric is likely to come into general use for carpets, rugs, curtains table and chair covers, &c.

DOMESTIC HINTS.

Gelatine.—There has lately occurred in Paris a controversy on the use of the Gelatine of bones for hospital soup, as recommended by D'Arcet; and the most contradictory opinions as to its qualities are daily published. Professor Liebig has, we think, decided this question. He has shown that Gelatine cannot yield blood, and that by itself, therefore, it cannot support life. But he supposes that it is dissolved in the stomach, and, being conveyed in But he supposes that it is dissolved in the stomach, and, being conveyed in the blood to every part of the body, acts as nutriment to the gelatinous membranes and bones alone. This ingenious idea explains both how Gelatine mixed with other animal matter forms a good diet, and how it is peculiarly adapted for the sick and convalesent, in whom it acts by giving nutrition to the gelatinous tissues, and so sparing much of the energy of the enfeebled digestive system, which is thus not consumed in producing Gelatine for these tissues, but is expended in the digestion of sanguiferous nourishment. We can now readily credit the statement of D'Arcet, who has shown that in all the hospitals where the Gelatine of bones has been used as a principal, but not the only article of animal food, the patients relish it, the success of the treatment has been much increased, and the period of convalescence on the average much diminished. Now that we possess what appears to be the true theory of the action of Gelatine, it is to be hoped that the prejudice, previously very natural, which exists in this country against its use, may be overcome; and that our hospitals may participate in the benefits of D'Arcet's benevolent system, which, when successfully conducted, has likewise the advantage of superior economy.—Quarterly Review of Liebig's new Work on Animal Chemistry.

MILKING OF COWS.—A "Small Tenant Farmer" was induced to try the

advantage of superior economy.—Quarterly Review of Lieon's new Norko Animal Chemistry.

MILKING OF COWS.—A. 'Small Tenant Farmer' was induced to try the milking of a cow three times a day, viz., morning, mid-day, and night; and found that it answered better in hot weather, than under the old system of milking twice a day. More milk is obtained; and the cream on the mid-day's milking is twice as thick as on that milked at night. Turnips render the milk lighter, and of more easy digestion, than the common fodder; while beet-root makes it extremely rich and substantial. The convalescence of the Count of Paris, the infant grandson of Louis Philippe, is attributed to the milk of a cow, fed on turnips, having been substituted for that of his nurse; the latter having been found to be not sufficiently nutritious.

FREDING OF POULTRY.—Professor Gregory, of Aberdeen, in a letter to a friend, observes—"As I suppose you keep poultry. I may tell you that it has been ascertained that if you mix with their food a sfficient quantity of egg-shells or chalk, which they eat greedily, they will lay, cateris paribus, twice or thrice as many eggs as before. A well-fed fowl is disposed to lay a vast number of eggs, but cannot do so without the materials for the shells, however nourishing in other respects her food may be; indeed a fowl fed on food and water, free

eggs, but cannot do so without the materials for the shells, however nourishing in other respects her food may be; indeed a fowl fed on food and water, free from carbonate of lime, and not finding any in the soil, or in the shape of mortar, which they often eat off the walls, would lay no eggs at all with the best will in the world. Lay this to heart, and let me know in the spring if the hens lay two, or two for one."

PAINE'S PATENT PROCESS salts meat in a few minutes: it is first placed in an iron vessel, from which the air is exhausted by an air-pump, brine being let in from another vessel; it is then drawn off by the air-pump, and more brine injected by a forcing-pump; and in fifteen minutes the meat is cured.

CUPEG.

LEMONS—HIMALAYAN METHOD OF KEEPING.—Pluck the fruit when it has attained its full growth, but is not quite ripe. It is then buried in deep holes in the ground, lining the pits, and covering the fruit with dry leaves. In this situation, it attains maturity, and if not bruised in packing, retains its form and freshness for a considerable period.

KITCHEN GARDEN ECONOMIES.—A very delicate vegetable, quite equal to Seakale or Asparagus, and of a taste intermediate between the two, may be easily raised in any quantity by any one who has a few square yards of garden ground, at several different times during the winter and spring, according as the succession of crop is required. Plant ten or twelve Turnips (any delicate kind) as closely as possible, and cover them with a box or Seakale pot: heap fermenting stable litter over and around, as for Seakale; and in about the same time or a fortnight more, a crop of blanched Sprouts will make their appearance. The crowns of the Turnips should not of course have been removed too closely. In dressing them for table, when they are about half done, pour away the water and give them some fresh; when cooked, serve them up with melted butter on toast.

STEAN-BAKED BREAD.—It has been known for some time at Vienna, that if the hearth of an oven be cleaned with a moistened whisp of straw, bread baked therein immediately afterwards presents a much better appearance, the crust having a beautiful yellow tint. It was thence inferred that this peculiarity must be attributed to the vapour, which, being condensed on the roof of the oven, fell back on the bread. At Paris, in order to secure with certainty so desirable an appearance, the following arrangement is practised:—the hearth of the oven is laid so as to form an inclined plane, with a rase of about 11 inches in three feet, and the arched roof is built lower at the end nearest the door, as compared with the furthest extremity. When the oven is charged, the entrance is closed with a wet bundle of straw. By this contrivance, the steam is driven down on the bread, and a golden-yellow crust is given to the bread, as if it had been previously covered with the yolk of an egg.

INDIAN PREPARATION OF SALMON.—The salmon are cured and packed in a peculiar manner. After having been disembowelled, they are exposed to the sun on scaffolds erected on the river banks. When sufficiently dry, they are pounded fine between two stones pressed into the smallest compass, and packed in baskets or bales of grass matting, about two feet long, and one in diameter, lined with the cured skin of a salmon. The top is likewise covered with fish skins, secured by cords passing through holes in the edge of the basket. Packages are then made, each containing twelve of these bales, seven at bottom and five at top, pressed close to each other, with the corded side upward, wrapped in mats, and corded. These are placed in dry situations, and again covered with matting. Each of these packages contains from ninety to a hundred pounds of dried fish, which in this state will keep sound for several years.

Bacon.—As it is of some importance to cottagers to know how best to STEAM-BAKED BREAD .- It has been known for some time at Vienna, that

several years

several years.

BACON.—As it is of some importance to cottagers to know how best to preserve their bacon, we have borrowed the following receipts from an old lady whose bacon is never rusty. For the bacon of a large pig take 14 lbs. of common salt, 1 lb. of saltpetre, and ½ lb. bay salt, with this mixture rub the bacon thoroughly, and then put it down tightly into a tub kept expressly for the purpose, having a lid to fit tightly on, and also an inner cover, which rests on the bacon, and presses it down as it diminishes. Before the salt is used it should be damped with a quart of cold boiled water. If these precautions are attended to, the bacon will preserve its colour and good flavour for 18 or 20 months. As soon as the weather becomes hot, the brine should be goured carefully out of the tub, be boiled and well skimmed, and when cold be again poured over the bacon.

Domestry to Yasar.—Persons who are in the habit of making their own

DOMESTIC YEAST.-Persons who are in the habit of making their own DOMESTIC YEAST.—Persons who are in the habit of making their own bread cen easily manufacture their own yeast by attending to the following directions:—Boil one pound of good flour, a quarter of a pound of brown sugar, and a little salt, in two gallons of water, for an hour; when milkwarm, bottle it, and cork it close, and it will be fit for use in twenty-our hours. One pound of this yeast will make eighteen pounds of bread.