

Science and Art.

Effects of Heat upon Meat.

A well-cooked piece of meat should be full of its own juice, or natural gravy. In roasting, therefore, it should be exposed to a quick fire, that the external surface may be made to contract at once, and the albumen to coagulate before the juice has had time to escape from within. And so in boiling. When a piece of beef or mutton is plunged into boiling water, the outer part contracts, the albumen which is near the surface coagulates, and the internal juice is prevented either from escaping into the water by which it is surrounded, or from being diluted or weakened by the admission of water among it. When cut up the meat yields much gravy, and it is rich in flavor. Hence a beefsteak or mutton chop is done quickly, over a quick fire, that the natural juices may be retained. On the other hand, if the meat be exposed to a slow fire its pores remain open, the juice continues to flow from within, as it has dried from the surface, and the flesh pines, and becomes dry, hard, and unsavory. Or if it be put in cold or tepid water, which is gradually brought to a boil, much of the albumen is extracted before it coagulates, the natural juices for the most part flow out, and the meat is served in a nearly tasteless state. Hence, to prepare good boiled meat, it should be put into water already brought to a boil. But to make beef-tea, mutton-broth, and other meat soups, the flesh should be put into cold water, and this afterwards very slowly warmed, and finally boiled. The advantage derived from "simmering"—a term not unfrequent in cookery books—depends very much upon the effects of slow boiling, as above described.

These are the views of Liebig and Professor Johnstone on cooking meat, and should be treasured up by every person who boils in a pot or fries in a pan.

Incense, or Odorous Fumigating Powder.

Take ground cloves and allspice, of each two ounces; gum benzoin, one ounce; ground cascarilla bark, half an ounce; cinnamon (in powder) half an ounce; orris root and sandalwood, of each one quarter of an ounce; and half a nutmeg, grated. Mix these ingredients well together, taking care that they are all in fine powder. This mixture forms a very fragrant incense; it is used by sprinkling a small quantity upon a very hot iron—a shovel, for instance; or if thrown upon a few hot cinders it diffuses in a room an exceedingly pleasant perfume, and, if not overdone, is very agreeable in a sick chamber. Under the name of incense, mixtures of this kind have been used from the earliest period; indeed, it is recorded in the 30th chapter of Exodus that the Lord commanded Moses "to confection" such a perfume, the ingredients of which are given in the 34th, 35th, and 36th verses. "Take unto thee sweet spices, stacte, and onycha, and galbanum; these sweet spices with pure frankincense; of each there shall be a like weight. . . . And thou shalt beat some of it very small. . . . Tempered together pure and holy." In the receipt we have given, any one or two of the materials may be omitted, if difficult to procure, without materially decreasing in odor.—[Piesse's Art of Perfumery.]

How Life is Sustained During Intense Cold.

When Dr. Kane and his party were conducting their explorations in the Arctic regions, with the thermometer at 70 degs. below zero for several months, the ordinary daily allowance to each man was six or eight ducks, or an equivalent in several pounds of fat seal.

Fat contains a great amount of carbon and hydrogen, therefore the fat consumed by Dr. Kane's party kept up the heat of the human furnace by intense combustion. The food that is requisite to sustain life in the Arctic regions would cause premature death in the tropical regions.

In latitude 80 degs., Dr. Kane found the Esquimaux Indian, the reindeer, and many varieties of the floral world, principally of the Alpine species. The latter were numerous and diminutive. How far north the human race and animals exist, is not known, but Dr. Kane's observations clearly establish the fact, that the

extreme cold of latitude 80 degs. is not the limit to their northern migration.

The Esquimaux are a migratory people, and with sledges drawn by dogs, undertake journeys of hundreds of miles in extent, depending for their subsistence upon such nourishments as chance throws in their way, such as fat seals and sea fowls, which are very abundant.

Hunters' Lantern.



The accompanying figure represents a lamp for hunters, for which application has been made for a patent by the inventor, J. P. Schafer, of Anderson, Texas.

The bright light of a torch or lantern fascinates deer, and hunters employ this means to approach quite near to them, sometimes as close as twenty yards, when they can easily be shot. The light also enables the hunter to see the eyes of deer at a distance of from 150 to 200 yards, and thus they become prominent marks for the deadly rifle. The object of this lamp or lantern is the employment of a convenient means to hunt deer at night by taking advantage of the attraction which the light exercises on the animal, and to afford light to the hunter.

A represents a case, with sides and back made of sheet metal, and its front of glass. The back plate is curved to fit the front of the head, and inside there may be placed a reflector plate, to concentrate the rays, and send them to a greater distance. B is a lamp inside of the case. It has three wicks, *a a a*—more or less may be used. *b c* are vent tubes to admit air for combustion; they are of such a height as to prevent any spilled oil entering them. The smoke is allowed to escape by perforations at the top. At the lower sides of the case there is a curved strip of metal, *d*, at each side. To each of these a strap is attached, to tie behind, as shown. *f* is another strap attached to the upper part of the lantern case, and thence passing down the back, and is secured to the hunter's waist-belt. In this manner this lantern is snugly secured to the head of the hunter, and he can carry it quite conveniently. It is a very superior method for night hunting to the common plan of carrying a torch or light of any kind in the hand, as this allows the hunter the free use of both hands; and it serves him not only for a beacon, but also a lure for his prey.

More information respecting this hunting lamp may be obtained by letter addressed to Mr. Schafer.

Gold Bearing Rocks.

Evan Hopkins, the English geologist, states, that the auriferous veins likely to prove very productive are the auriferous pyrites, but the great productions of gold have hitherto been obtained from superficial deposits. The reason why it is generally conceived that quartz is the matrix which produces gold, is that the precious metal, after precipitation, adheres more strongly to quartz than to the other auriferous rocks. Although the quartzose bands produce occasionally large masses of gold, yet the quantity bears but a small proportion to

that which is obtained from the ferruginous and talcose slates.

Sir Roderick Murchison says, "When the Spaniards first visited America, gold, collected by the poor people with their sticks out of the gravel of the earth, was found in abundance, covering the palaces of princes, but it is now gone. What had been the case with Mexico and Peru, would yet be the case with Australia, but it will, no doubt, produce gold for many years to come."

Cure for Hydrophobia.

Any remedy for this terrible disease should be hailed as a blessing. The Elizabethtown (N. J.) *Post* comes to us marked by the editor to direct our attention to the following remarks and receipt for curing this scourge:

"Some three years ago we published in the *Post* a remedy for that terrible disease, but it seems credence was not given to our statement, for it was never copied, to our knowledge. Yet there are still living many evidences of its efficacy. It was first prescribed on a consultation of three physicians for an individual who had been bitten and badly torn by a dog known to be mad, and we believe, after the individual had one or two of the spasms of hydrophobia. The patient was cured, and lived many years. Of the three physicians but one still survives, a man of nearly 85 years, and he has had occasion to prescribe the same remedy, during a long term of fifty years' practice, for other persons bitten by rabid animals, and always with success. The last time was within our memory, between the years 1820 and 1824, we believe, when several children in the south part of Chesterfield, or north part of Willsborough, in this county, were bitten by a cat. Animals were bitten by the same cat, and went mad and died. We know not if any of the individuals bitten are still living in that neighborhood, but there are, undoubtedly, others who will remember the circumstances. A remedy so well-known to have been proved a cure, should be known to the medical profession and to the world; and we once more publish it, hoping that many others may imbibe a portion of the faith we ourselves have in it; and again prove its efficacy should an occasion unfortunately offer:

"Keep the sore running or discharging matter as long as possible with powdered verdigris dusted into the wound, and give one grain of mineral turpeth at a dose three times in the day in a little dry sugar rubbed very fine, and washed down with warm tea or water, until the mouth is slightly affected with the mercury, then stop till all the appearances of the affection in the mouth have disappeared; then repeat the course in the same way. Repeat the courses three or four times in the course of six weeks, when I consider the patient out of danger."

Ebony Wood.

Ebony wood is extremely hard, and susceptible of a very fine polish. Its color is black, red, or green. The black is most esteemed, and is imported principally from Madagascar and the Isle of France. Red ebony, so called, though its color is brown, striped with black, is less compact, and is also brought from Madagascar. The green is softer than either of the other kinds, yields a fine green tincture, which is employed in dyeing, and brought from the West Indies. The best kind is jet black, and free from knots or reddish veins. Ebony is imitated by subjecting the pear tree to a hot decoction of galls, and, when this is dry, applying black with a stiff brush. It is used for various mechanical and other purposes.

Cure for Cutaneous Affections.

A French physician recommends the use of pomade of proto-sulphate of iron as a remedy for all those diseases or affections of the skin which, in their essence are secreting, and which generally occur in lymphatic temperaments and constitutions. It is also stated that in the disease known as pyrosis, when it is unaccompanied by extensive ulceration, or organic malignant disease of the stomach, or by disease of the liver—the most marked benefit will follow the use of gallic acid.

Useful Receipt.

Wounds in cattle are quickly cured by washing several times a day with a mixture of the yolk of eggs and spirits of turpentine.—[Phila. Ledger.]

To Clean Kid Gloves.

Take the gloves, place them on a clean board, and stretch out their fingers. Then take a mixture of alcohol, ten parts, and turpentine, two parts, in a cup, and rub them with this—using a soft sponge for the purpose.—This will remove the grease and dirt, and not injure the color. All the dirt and liquid must be pressed out of the gloves with the sponge by squeezing it in the hand, then rubbing it on the gloves to absorb the liquid, until no more can be taken up in this way. Both the outside and inside of the gloves should be treated in this manner. They are then set to dry in a moderately warm place, and during the time of drying the fingers are stretched from time to time, to prevent them from shrinking. Some dry them on artificial hands to keep the fingers stretched.

In cleaning gloves by this process, care must be taken not to approach too near a light or a fire. The liquid above, for cleaning the gloves, is the same as that commonly known by the name of "liquid spirit gas," used in lamps.

To Wash Silk.

To wash silk with great success spread it on a table, and then rub it with a sponge dipped in a mixture of equal parts of soft soap, brandy, and cane molasses. Rinse it thoroughly in three successive portions of water, and iron it before quite dry.

[The above we have noticed in two or three of our exchanges. It is not a good recipe.—Just think of using molasses for a soap. Weak liquid ammonia and whiskey make a much better wash for silk. Place the piece of silk to be cleaned on a smooth clean board, then take a sponge, and dip it into liquid ammonia diluted with one-half its measure of water, and rub the surface of the silk well on both sides. After this rub it in the same manner with whiskey, or dilute alcohol, then hang it over a cord until it is nearly dry; then iron it on the wrong side. This is the most simple way to clean silk dresses.]



Inventors, and Manufacturers

ELEVENTH YEAR!

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