The Dairy.

The National Dairy.

The tenth annual convention of the American Dairymen's Association was recently held at Utica, N Y., commencing on Jan. 12th. It is to be regretted that the Pacific coast could not have been represented there. It would have been to the advantage of our own dairy interests and we should have contributed our mite of interesting and useful information. Although this association has selected Utica as its established place of meeting, it is not because this is the center of the most celebrated dairying district in America, if not in the world but because it is central in its location and more easily reached from all points. Far from being local or exclusive in its character and membership it is in reality what it claims to be, an American association numbering among its mmbers practical dairymen from Canada on one side, to South Carolina on the other. We hope the Dairy of California will be represented at the eleventh annual meeting of the association.

We would like to lay before our readers the entire proceedings of this convention, but this is impossible; we will, however, make some selections culling such prints as we think of most practical value to our readers:

The Past Season.

Mr. Moon, of Herkimer, said early in the year the season was unfavorable, and milk of night was brought skimmed; the people asked for making of butter earlier in the season, so that it had required about ¼ lb. of milk more to a lb. of cheese. The average had been 98. The weather had been wet along toward the middle of the season, but no difficulty had been experienced in keeping milk over night. The latter part of the season had been dry, which had caused decrease in milk.

Mr. Ellsworth, of Barry, Mass., said Boston dealers had told him the quality of butter the past year was poorer than the year previous. Very little good butter was in market. The butter was shipped from different points.

Mr. Farrington, of Canada, said that buyers had found their cheese better the last year. They had a very dry season. He did not know whether the improvement was in quality of milk or in manufacture.

Home Market.

Mr Farrington inquired why the home consumption fell off.

Mr. Peters said a fine, small cheese is needed. The popular taste cannot be educated to skim cheese.

Mr. Douglass, of New York, was not aware there had been any special diminution in the domestic trade. There are more direct domestic outlets, instead of ordering though New York. He thought therefore the consumption was if anything increased.

Mr. Folsom agreed with Mr. Peters, and a duced figures to show it. There was a falling off in home consumption in 74 of nearly 40,000 boxes. The short lots fine, small cheese has always sold readily on the score of size, not fineness. To hold the home trade you must make small cheese and fine cheese, not skim cheese. He was sorry to see the creamery trade so general. There was a limited demand for skim cheese and only limited. Mr. Moon, of Herkimer said the public does not recoguized individual capacity the fact stated in the address that the great amount of poor cheese pulls down the prices. It renders the trade unstable. This poor quality is induced to a great extent by skim cheese.

Preservation of Butter.

Mr. L. T. Hawley of Onondaga, addressed the Convention on Preservation of Butter. He proposed to advance somewhat new ideas. Butter should be so manufactured as to be its own preserver. Salt is used in so small proportion that it does not preserve it. Butter will become frowy as soon with a salt flavoring as without. If salt only flavors butter how shall we preserve it? and that is so well understood by good dairymen that it seems superfluous to discuss it further. Select cows noted for richness rather than quantity of milk. Keep them in the best condition with fine pasturage and pure water Preserve the milk from sources of taint. Keep every thing in the most cleanly condition. Skim as soon as the milk is slightly sour and place in temperature of 55 to 64°. He proceeded to detail butter manufacture, urging washing with pure, cold brine, which enables the butter to become cleansed of the cheesy matter. Salt with pure Onondaga salt, not as a preserver but as a flavorer of butter. Salt one ounce to the pound, more or less, according to the amount of water in the butter; one ounce to the pound is not too much for a year's keeping. Avoid over-working, as that causes rancidity. Air tight firkins made of white oak, solid timber, should be used. Soak the firkins with hot brine to neutralize the taste of the wood. Pack the butter in carefully, cover with cloth and layer of salt and cover with clean flat stone, and store in a cellar where there are no vegetable odors. Salt will preserve butter if there is enough, but in butter only enough is used to flavor and harden it. He urged the importance of manufacturing, packing and storing butter so well that it will keep without salt. If butter is taken from the churn before it is gathered and put into a sieve, made for such purpose, and clear salt water be poured over it, it will the sooner be cleared of the buttermilk and cheesy matter, which are what causes butter to frow, and not the salt.

Mr. Hawley, in reply to inquiry, said his experience showed that if the butter fat only is retained in the butter it will keep without any difficulty. Butter made by Mr. Flower the way described kept sweet two years and four months. Cheesy matter in the butter will make it frowy and the salt will not prevent it. Too much fault is laid to the salt. If the cheese is well manufactured undoubtedly any kind of clean salt will preserve it sufficientiy.

Mr. F. D. Stone, of Cleveland, O., addressed the convention on "Butter and its Preservation." It is not unlikely that the first idea of butter was obtained by the agitation of milk in bags conveyed on camels in crossing the desert. Analysis of 1,000 parts of butter showed 30 of butter. The butter floats in the milk in globules. These globules rise to the surface and constitute cream. Cows fed on odorous food impart a taint to the milk. So even after the milk is drawn from the cow; even a sprig of catnip on the shelf will impart odor to milk. The milk should be kept as near blood heat as possible till brough to rest in the pan. The best-approved temperature for obtaining cream is 60 to 70°. The increased temperature in churning is due only to friction, and not chemical action of the milk. The purest water, if any is used at all, should be used in washing the butter, and every particle of water worked out. Good butter will be firm and brittle, a sort of incipient crystallization. Butter loses flavor through fermentation of lactic or butyric acid, through cheesy matter being left in the butter. A serious defect in butter packages is the absorption of butter into the wood. A great deal of loss occurs annually through this cause. Objections were found to stone jars and metallic packages. The desired substance for the inner surface of metal vessels is paraffine, which by chemical aid can be applied so that no injury will result to butter from packing. He announced that he would exhibit specimens of this paraffine and metal packages thus prepared for packing Wednesday. The cost is about the same as that of the wooden package. He exhibited a small package. The paraffine is used on the tin, which is granulated to hold it, and a little paraffine poured on top seals the package. The tin package has an outer case of wood.

Mr. Douglass, of New York, said spruce is used in Northern Oneida and in Lewis county, and dealers have requested that this wood be not used. It imparts an odd taste. This improvement in package is a desired improvement. Proper care should be given to the investigation of this matter. Any soft, resiny wood is objectionable. Ash with hard cover is desirable.

Domestic Economy.

Good Food for Working Men.

How much pleasure is lost and how much material is wasted by a lack of intelligent cooking, too many think that neither science nor art has anything to do with the duties of a cook. And yet we all know from pleasant as well as sad experience, that some cooks will prepare a most tempting repast from materials, which in the hands of another, will come on to the table so ill prepared as to need a most ravenous appetite to induce one to eat.

The hard work of the farmer or mechanic so sharpens his appetite; the rugged health of the family caused by abundant exercise in the open air and the multitudinous duties of the housewife, all lead us to fall into careless habits in the selection and preparation of our food.

While we are aware that economy on every hand is necessary to the success of the farmer above every other class of working men, we can see not the slightest reason why he should not live well. There are many delicacies within his reach. He can have his varieties of fresh garden vegetables, his plenteous supply of poultry, fresh eggs, choice gilt-edge butter, milk and cream in abundance, plenty of fruit, etc. Why should he live poorly? Because in far too many instances all these resources from a lack of intelligent and pleasing cooking are not used to adantage.

The housewife does not use the material at her command understandingly. The bread will be made always in the same way. The potatoes will be boiled for every meal in stereotyped fashion; the meats ditto, and the farmer's table which could be most invitingly supplied, is generally coarsely laid.

This is not always from a lack of knowledge, as is proven by the inviting repasts which are temptingly placed upon the table when company is invited. But in such households it is due to a careless lack of forethought and a want of appreciation of good food.

Scientific economy is lost sight of in our living. How seldom do we stop to count the cost of a meal, or of any particular plan of living. We do not recommend extravagance in food, but ask the lady members of our Order to give careful intelligent thought to the preparation of their meals.—*Husbandman.*

To Steam a Turkey.—All of us are used to roast and boiled turkey, but a steamed turkey is more of a novelty, while it is also a most delicious dish. Cleanse the fowl thoroughly, then rub pepper and salt well mixed into the inside of it. Fill up the body with oysters mixed with a small cupful of bread crumbs. Sew up all the apertures; lay the turkey into a large steamer and place over a kettle of boiling water, cover closely, and steam thoroughly for two hours and a half. Now take it up; set the platter in a warm place, and turn whatever gravy there is in the steamer, straining first into the oyster sauce which you have prepared in the following manner: Take a pint of oysters, turn a pint of boiling water over them in a colander. Put the liquor on to boil, skim off whatever rises to the top. Thicken it with a tablespoonful of flour rubbed into two tablespoonfuls of butter; season well with pepper and salt. Add two or three tablespoonfuls of cream or milk to whiten it, and pour it over the turkey and platter; serve boiling hot. This sauce must be made while the turkey is still in the steamer, so that it can be poured over the turkey as soon as it is taken up.

Snowflake Cake.—Take a half cup of butter, two cups of white sugar, four cups of flour, one cup of sweet milk, three eggs, one teaspoonful of cream-of-tartar, and one-half of that quantity of saleratus. Stir butter and sugar together, add the beaten yolks of eggs, and half the flour with the cream-of-tartar in it; turn in nearly all the milk, dissolve the saleratus in what is left and add it. Beat the whites of the eggs and mix in; stir in remainder of the flour. Bake in jelly-cake tins. Grate the meat of two fresh cocoanuts after paring off the outer skin; add to them one cup of sugar and the beaten white of two eggs. Spread between the cakes, which should have been baked in three pans. Heap the cocoanut very high on the top of the uppermost cake and scatter sugared almonds among it.

Potato Fritters.—Boil two large potatoes, mash them well, beat four yolks and three whites of eggs, and add to the above, with one large spoonful of cream, another of sweet wine, a squeeze of lemon, and a little nutmeg. Beat this batter half an hour at least. It will be extremely light. Put a good quantity of fine lard in a stewpan, and drop a spoonful of the batter at a time into it. Fry them; and serve with a sauce composed of a glass of white wine, the juice of a lemon, one desert spoonful of peach-leaf or almond water, and some white sugar warmed together, or the common wine sauce.

German Apple Pudding.—Take a deep tin pudding dish and cover it with a layer of the best pie crust. Have some good, tender apples cut fine, and spread over the paste; a layer of apples, with sufficient sugar for sweetening, and cinnamon and nutmeg to taste; again a layer of apples, etc., until your dish is filled, when you pour over it a tea-cup full of cream, add your cover and bake to a light brown.

Professor Silliman has published a card in New York, with regard to the use made of his name in the complaint of the English stockholders in the Emma mining company against Park, Stewart and others, in which he says every charge contained in that complaint, "emanating from any source, imputing to me fraud, complicity or other improper act, either in connection with the examination of the Emma mine, with its sale, or with the owners thereof, is entirely without a shadow of truth."

The Navel Orange.—This excellent fruit, so named on account of the peculiar form of its calyx, can now be obtained in our market. They are imported from Australia, not yet having been raised in our own country. They are of good size, fine sweet flavor and are entirely seedless. The skin is somewhat thicker and the pulp less solid than that of the ordinary sweet orange.

Useful Information.

The Alchemists.

What manner of men were the alchemists? How did they preserve, cultivate and transmit the wonderful delusions of their creed? We have endeavored in a former chapter to show that the idea of transmutation arose from the old Greek idea of the conversion of one element into another; and the belief in the possibility of transmutation once admitted, the pursuit of the alchemist would naturally follow in a mystical and credulous age. As to the men themselves their character was twofold; for there was your alchemist proper, your true enthusiast, your ardent, persevering worker, who believed, heart and soul, that gold could be made, and that, by long search or close study of the works of his predecessors, he could find the Philosopher's stone; and there was your knavish alchemist, a man who had wits enough to perceive that the search was futile, and impudence enough to dupe more credulous people than himself, and wheedle their fortunes out of them on pretence of returning it tenfold in the shape of a receipe for converting lead into gold . . . . . Of the true alchemist we have many pictures. The alchemist, the astrologer, the mystic, the wizard, were men of the same stamp. They often practiced the same arts side by side. The same habit and altitude of thought belonged to one and to all, and became all equally well. Take the dreamy, maudlin, semi-manical Althotas, who had been described so well by Dumas: "An old man, with gray eyes, a hooked nose, and trembling but busy hands. He was half buried in a great chair, and turned with his right hand the leaves of a parchment manuscript." Note also his intense abstraction, his forgetfulness of the hour, the day, the year, the age, the country; his absolute and intense selfishness and absorption, the concentration of the whole powers of his soul upon his one object. Or let us look at Victor Hugo's Archidiacre de St. Josas, in his search for the unseen, the unknown, and the altogether uncanny; the bitterness of his soul, his passionate musings, his conjurations and invocations in an unknown tongue; his own self, that wonderful mixture of theologian, scholar, mystic, perhaps not much unlike the divine S. Thomas Aquinas himself.

"If we peep into Dom Claude's cell, we are introduced to a typical alchemist's laboratory—a gloomy, dimly-lighted place, full of strange vessels and furnaces and melting pots; spheres and portions of skeletons hanging from the ceiling; the floor littered with stone bottles, pans, charcoal, aludels aad alembics, great parchment books covered with hieroglyphics; the bellows with its motto—'Spira, Spera'; the hour glass, the astrolabe, and over all cob-webs and dust and ashes."

Cement Walls and Cisterns.

With one pint of quick lime or good (new) cement, we use from one to two parts of coarse, sharp sand, to make a stiff paste. This for quality, depends on the freshness of the lime or cement, which requires less sand in proportion to its strength. Sand is useful to diminish the cracking, as the paste or mortar dries, thereby to give it "body" and help fill up. Quick mortar should be made up every day, for each day's work, which is contrary to practice in this country, but the mortar is better. It never becomes soft after use, from age. Into this, fine and coarse gravel can be worked by the trowel, as the joints are flushed. For cisterns, Rosendale and Portland cement takes the place of lime, with only less sand, and makes walls as solid as Ransome stone. The magnesia of the cement seems to have a peculiar affinity for unburnt limestone and brick surfaces.

Finely pulverized soft brick, mixed with about equal parts of wood ashes and a little water in a basin, is put on the surface of a cement-laid or grouted floor of a dwelling house, with a trowel, and worked up to a finish that much resembles a glaze on pottery. This is easily swept and washed, and wears always a clean appearance. As a paste to repair old cisterns and stop cracks, with or without the addition of a small quantity of iron filings and sal-ammoniac, this is very valuable.

We wish it were possible to impress our masons with the fact that thin joints make the best walls, and require the least quantities of water and cement, both of which are chemically stronger and better for being mixed for the purpose.

Chalcedony.

What boxwood is to the wood engraver—the means without which the finest art would be impossible—that chalcedony is to the engraver of gems. Hard without brittleness, susceptible of a fine and endurable polish, tinted by nature with beautiful, and at times, strongly contrasted hues, or capable of taking such colors at the hand of man, it has been from the earliest period of art not only the favorite medium but the only possible medium of the gem engraver's most striking effects. In its simplest state chalcedony is an unattractive white stone, nearly transparent, and chiefly useful for making spear-heads and arrow-tips, or there more modern representatives, gun-flints. Sometimes it has a striped or banded appearance, due to alterations of more or less translucent layers, ranging in color from very white to the white of skim milk, still not very serviceable for gems or jewelry. When strained by metallic oxides, however, chiefly those of iron, it raises to the dignity of gemstone, isard, cornelian, chrysopraise, etc., which, uniformly tinted brown, yellow, red or green, as agate, onyx-sardonyx, etc., when the colors lie in bands or strata, or are separated by layers of white. The natural formation of these flowers of the mineral world is recorded in their substance. Though commonly found in lavas and other igneous rocks, or in the debris remaining from their disintegration, gemstones are substantially an aqueous product, and require the agency of fire simply to develop their fine colors, a step in their production more the work of art than of nature.

Age of the Australian Gold Drift.—Among some fossils recently described by Professor M'Coy, of Melbourne, is an extinct wombat, from the gold drifts of Victoria. This fossil, called *Phascolomys pliocenus*, is of much interest, as having enabled Professor M'Coy to show that the auriferous deposits whence it is derived, instead of being merely alluvial, should be referred to the more ancient pliocene period, thus corresponding in age with the gold drifts of the Urals.

The Velocity of Light.—MM. Fizeau and Cornu have been measuring the velocity of transmission of light, by experiments carried on between the Paris Observatory and Montlhery. The light sent to Montlhery is reflected and returns to the Observatory, the distance there and back being twenty-two thousand yards. This experiment has never hitherto been made on so large a scale, or with such precautions. Ten powerful instruments were used.

How to Distinguish Good from Poisonous Mushrooms.

So many deaths or severe cases of poisoning occur from eating poisonous mushrooms, that it is very important to know how to distinguish the good from the bad. The following is given by Prof. Bentley, which, though not full or unerring, gives the general characteristics which the edible or under trees and poisonous species of fungi may best be distinguished:

The edible mushrooms grow solitary, in dry, airy places, and are generally white or brownish; they have a compact, brittle flesh; do not change color, when cut by the action of the air; juice watery, and odor agreeable; taste not bitter, acrid, salt or astringent.

The poisonous mushrooms, on the contrary, grow in clusters in woods, and in dark, damp places, and are usually of a bright color; their flesh is tough, soft and watery, and they acquire a brown, green or blue tint, when cut and exposed to the air; the juice is often milky, the odor commonly powerful and disagreeable, and the taste either acrid, astringent, acid, salt or bitter. These characteristics are almost invariable.

Horticulture.

Pruning, its Principles and Practice.

[From Pacific Rural Press.

Editors Paras:—This is one of the most important operations connected with the management of trees. It may therefore be reasonably presumed that no one is capable of managing trees successfully without knowing well how to prune, what to prune, and when to prune.

This knowledge can only be acquired by a careful study of the structure of trees; because the pruning applied to a tree must be adapted to its particular habits of growth and mode of bearing its fruits.

In view of this fact; I should say something of the structure and mode of formation of the different parts of fruit trees, but to enter into a full detail of all of these facts would consume too much time and space for my present limits.

The idea that our bright California sun and clear atmosphere render pruning an almost un-

If a tree is severely pruned immediately after it has put forth its leaves, it receives such a check as to be unable to produce a vigorous growth the same season; the sap is impeded in its circulation, and the result is that a large number of the young shoots that would have made vigorous wood branches had they not been checked, assume the character of fruit-spurs and branches.

Pruning to Diminish Fruitfulness

Is conducted on the same principle as that to renew growth, for this, in fact, is the object. The removal of large branches, where they are to be entirely separated from the tree, is often very clumsily performed. They are either cut so that a portion of the base of the branch remains and sends out vigorous shoots, defeating the objects of the pruning; or they are cut so close that a portion of the wood of the main branch on the stem is taken with them, and a wound made which requires years to heal up. Both these extremes should be carefully avoided.

The Season for Pruning.

In California, I would say that all fruit trees should be pruned in the dormant season—especially the apple and pear; the peach and prune just as the buds begin to swell. The fruit and leaf buds are then easily distinguished from one another, and the object of pruning is accomplished with more precision.

Grapes, gooseberries and currants, may also be pruned at any time in winter. The cherry-tree should always be lightly pruned, because severe amputations almost invariably produce the gum.

Where it is absolutely necessary in the spring, the wound should be coated with grafting composition.

The Theory

Of the pruning of fruit trees rests on the following general principles:

1—The vigor of a tree subjected to pruning depends, in a great measure, on the equal distribution of sap in all its branches. 2—Prune the branches of the most vigorous parts very short, and those of the weak parts long. 3—Leave a large quantity of fruit on the strong part, and remove the whole or greater part from the feeble. 4—Bend the strong parts and keep the weak erect. 5—Remove from the vigorous the superfluous shoots as early in the season as possible, and from the feeble parts as late as possible. 6—Pinch early the soft extremities of the shoots on the vigorous parts, and as late as possible on the feeble parts; excepting, always, any shoots which may be too vigorous for their position. 7—The sap acts with greater force and produces more vigorous growth on a branch or shoot pruned short, than on one pruned long. 8—The sap, tending always to the extremities of the shoots, causes the terminal to push with greater vigor than the laterals. 9—The more the sap is obstructed in its circulation, the more likely it will be to produce fruit buds. 10—The leaves serve to prepare the sap absorbed by the roots for the nourishment of the tree, and aid the formation of buds on the shoots. All trees therefore that are deprived of their leaves are liable to perish.

If these principles and practices of pruning be carefully studied in connection with the habits of growth and bearing of the different ruit trees, pruning will be comparatively an easy matter.

The mode of obtaining any particular form or character cannot fail to be perfectly plain and simple; yet no one need hope to accomplish in all things the precise results aimed at, for even the most skillful operator is sometimes disappointed. But those who give constant attention to their trees will always discover a failure in time to apply a remedy. I insist upon it because I have been taught it by most abundant experience—that the most unremitting watchfulness is necessary in conducting trees in particular forms. It is not by any means labor that is required, but attention that the most delicate hand can perform. Fifteen or twenty minutes at a time, say three times a week during active growth, will be sufficient to examine every shoot on a moderate collection of orchard trees; for the eye very soon becomes trained so well to the work that a glance at a tree will detect the parts that are either too strong or too weak, or that in any way require attention.

This is one of the most interesting features in the management of orchard trees. We are never allowed to forget them. From day to day they require some attention and offer some new point of interest that attracts us to them and augments our solicitude for their prosperity, until it actually grows into enthusiasm.

W. H. Nash.

Cattle Pest in Europe.—The cattle pest continues to rage in Russia, not less than 300,000 animals having perished from it last year. The last opinion seems to be that the railroads are among the cause of harm and that veterinary inspection is not to be relied on.

Bullion Product.

It is well known that the figures representing the annual bullion product of the Pacific States and Territories are always lower than the real production. Nevertheless the tables furnished by Wells, Fargo & Co. are recognized as statistics upon which to base calculations of advance or decline, as there are no others except such as are based upon estimates alone. This company, as common carriers, handle most of the bullion produced, carrying it from the mining districts to the mints, where it is coined. They have, therefore, the best opportunity of obtaining reliable data with reference to the bullion production. Still it must be remembered that the figures they give only represent what has actually passed through their hands, so that there is no danger of an over statement. But considerable dust and bullion is carried from the mines by private hands, of which Wells, Fargo & Co. know nothing. It frequently happens in this State that after a clean-up, a miner with a few thousand dollars, who is going to San Francisco, will carry his own bullion so as to save the charges of the express company. This, of course, happens elsewhere, so that the bullion product, as stated by Wells, Fargo & Co., falls actually short of the real product.

How much it falls short, is, of course, impossible to say; but 20 per cent. is usually added to the sum actually handled by Wells, Fargo & Co., for that carried by other means. There is considerable complaint from the newspapers in the Territories, especially those with comparatively small production—concerning the amounts as given by Wells, Fargo & Co. They perhaps, forget that without these statistics, which are compiled with some trouble by Wells, Fargo & Co., we should be entirely at the mercy of *estimates*, or would have to wait for those compiled by the United States Mining Commissioner, which are published a year or two behind time. Mr. Valentine, the General Superintendent of Wells, Fargo & Co., deserves credit instead of blame for furnishing us such as he does. Mr. Valentine considers that the allowance of 20 per cent. for "under-valuation and other conveyances" is a liberal concession. In some of the Territories, Arizona and Colorado, for instance, the statement is usually considered low. From Colorado and Utah considerable ore and base bullion is shipped, of which Wells, Fargo & Co. have no official knowledge. In Arizona considerable dust is shipped by private hands as, in fact, is the case in all the States and Territories.

The bullion statistics give Arizona this year, a very poor showing for all the work done in 1874, and the figures are undoubtedly low. Colorado complains of injustice in this matter also, as will be seen by reference to an article in another column. In fact, the figures of all the States and Territories are small and may be taken as a minimum statement; Nevertheless they are much more reliable than mere estimates, and certainly more correct than half the statistics we take for granted on seeing them in print. The Government sets aside such a meagre appropriation for the collection of mineral statistics, that it is impossible for the Commissioner to collect them in any systematic manner. If all mine owners would send to some authorized individual an account of their work, it would be all right; but mine owners will not do it any more than people will pay taxes without compulsion.—*Scientific Press.*

Wear and Repair of the Brain.—The notion that those who work only with their brains need less food than those who labor with their hands has been the cause of untold mischief. Students and literary men have often been the victims of a slow starvation, from their ignorance of the fact that mental labor causes greater waste of tissue than muscular. According to a careful estimate, three hours' hard study wears out the body more than a whole day of work on the anvil or farm. "Without phosphorus, no thought," is a German saying; and the consumption of that essential ingredient of the brain increases in proportion to the amount of labor which the organ is required to perform. This wear and tear of the brain are easily measured by careful examination of the salts in the liquid execretions. The importance of the brain as a working organ is shown by the amount of blood it receives, which is proportionally greater than that of any other part of the body. One-fifth of the blood goes to the brain, though its average weight is only one-fortieth the weight of the body. This fact alone would be sufficient to prove that brain-workers need more food and better than mechanics and farm laborers.—*Builder.*

To Render Glass Opaque or Frosted.—According to *Dingler's Journal*, a sheet of ordinary glass, whether patent plate or crown does not matter, is cleaned; and if only portions of it are to be frosted, those are left bare, while the others are protected by mechanical means in any simple manner. Some floor spar is rubbed to a fine powder and mixed with concentrated sulphuric acid, so as to make a thin paste, and this is then rubbed by means of a piece of lead upon those parts of the glass required to be rendered opaque. A fine frosted outline or design may thus be produced upon a sheet of smooth transparent glass. To finish the operation, the glass is gently heated in an iron vessel covered with a funnel passing up the chimney, to get rid of the noxious fumes that are given off; on cooling, the plate is washed with a dilute solution of soda or potash, to remove any acid yet remaining, and is then rinsed in water. Focusing glasses for the photo camera, and development glasses for pigment printing, can be prepared in this way at very little expense.

Buffalo hunting is becoming more and more popular among our English cousins. It is said that fully one hundred English gentlemen are over in a body for a grand buffalo hunt on the plains. The hunt is to be organized on a magnificent scale. Twenty scouts, headed by Buffalo Bill, will chaperon them, and in addition to a vast retinue of servants, cooks, grooms, valets, etc., they will be accompanied by a brass band, which will discourse sweet music as they gather about their camp-fire to partake of the evening meal of buffalo meat.

Naturalization of Chinamen.—Poland, from the House Judiciary Committee, have reported favorably on Page's bill to restore the law relating to naturalization just as it was prior to the late alteration, in which the omission of the work "white" left the door open for the naturalization of Chinamen. The result will be, should the bill pass, as it most likely will, to prevent the naturalization of Chinamen.

Another New Asteroid.—The Smithsonian Institute has received a cable dispatch announcing the discovery, at Berlin, of a new planet, in right ascension 22°, declination 16° 26′ north, of the twelfth magnitude.