ICE CREAM.

A correspondent asks how to make ice cream. We will tell him. A pint and a half of milk and half a pint of cream, scalded together; three eggs whipped to a stiff froth, and stirred in rapidly, and sweetened to taste; flavor this mixture with any thing preferred—peach water, bitter almond (which is nearly the same), vanilla, or lemon. Pour it in a freezer, and keep the same going continually until wanted.

A frozen custard can be made by adding cornstarch, but this is not genuine ice cream, and tastes "floury," compared with the real article.

The great secret in making fine cream is to freeze it properly and quickly. Crystallization, or the act of freezing, is a great separator, and when two substances, such as cream and milk, are mixed, slow congelation separates the watery portions from the other parts, and causes the little pieces of ice, common in poorly-made ice cream. Quickly-frozen cream has a smooth continuity, if we may use such a term, greatly admired. It is easy to make a dish of cream for ordinary use by taking a three-quart pail and setting it in a small wash tub, surrounded with ice and salt, but the article so made will be very different from the buttery and even mass frozen in the proper apparatus.

REVISING THE REVENUE LAWS.

A commission of three gentlemen, authorized by a law of Congress enacted last winter, is in session in the Custom House in this city, to inquire into the sources of national revenue and the best method of collecting the same. The appointments were made by the Secretary of the Treasury and consist of Messrs. David A. Wells, of Troy, Stephen Caldwell, of Philadelphia, and S. S. Hays, of Chicago. E. B. Elliott, of Boston, has received the appointment of seeretary to the commission.

The various sources from whence the Government derives its internal revenue will be carefully examined into by the commission, with a view to recommend such changes to the next Congress as will tend to establish a more satisfactory and equitable system of national taxation.

With such men in the commission as Mr. Wells, long known as editor of the "Annual of Scientific Discovery," author of "Our Burden and our Strength," and many other useful works, we are sure much good will result from the investigation they will make. The commission is impowered to send for persons and papers and take testimony.

AN ENCOURAGING PROSPECT.

The American Institute has decided to hold its annual fair this fall, as usual, and means to make it very different from the exhibitions in former years. We are assured by the committee that no pains will be spared to make this fair a great success. "It is to be a mechanical fair," said a member to us, "and all the old ladies' bedquilts are to be excluded." We trust also that the wonderful compounds "which stimulate a growth of hair on the baldest head," will also be omitted and the space usually occupied by them filled with something more interesting to the public, and more valuable to the arts. There are to be machines of all kinds in full operation and ample space will be allotted to exhibit them to the best advantage. The fair will be open from September 15th to October 19th, or about four weeks, and will be held at the corner of 14th street and 6th Avenue. There is ample material in this country to make this fair a great success, and with the inducements held out by the Institute, we have no doubt that it will be. All communications in regard to space should be sent to S. D. Tillman, Esq., agent of the American Institute. We have no further information to give of any nature whatever.

CITY DIRECTORY.

Trow's New York City Directory, for the year ending May 1st, 1866, is issued. It is a work of 1300 pages; 1070 being devoted to an alphabetical list of the names of the business men and heads of families of New York, 170 to advertisements, and 60 to lists of the streets, churches, banks, societies, city officers, and other things convenient for reference. This is the 79th volume, and contains 166,144 names, 13,592 more than the volume for last year. It is printed in clear type, on smooth paper and is just what a directory of this city ought to be.

Facts About Eggs.

Eggs differ a good deal in weight. This difference is to be found not only in the eggs of different breeds or races of fowls, where it might be expected, but often, also, in the eggs of the same individuals, both among hens and the smaller and wild birds.

Barley is said to increase the proportion of the yellow of the egg, and rye is said to favor the development of the white.

Eggs lose a slight portion of their weight when left to themselves; the contents becoming dried up gradually and reduced, so that there is left a solid residuum withdraw towards the small end of the egg, the opposite end being filled with air. Eggs which weighed two and a half ounces when fresh, weighed but a very small fraction over an ounce at the end of two years. During incubation the diminution or weight is pretty rapid.

It is thought by naturalists that the eggs of domestic hens of the present day are, on an average, very nearly a third larger and heavier than those of the hens of the ancients.

The proportions of the yolk to the white of the egg are very nearly the same in each of the different races, but in proportion as the egg diminishes in size, does the relative proportion of the white to the yellow of the egg diminish; that is, small eggs have more yellow than large ones in proportion to their size, but the weight of their shell is also greater in proportion.

Eggs which contain the largest yolk or yellow, like those of the Brahma and Cochin China hens, produce the largest chickens.

The period of laying is ordinarily about five months in the year. The Asiatic fowls will often begin to lay somewhat earlier than other breeds, but they usually stop earlier.

The latest expression we have from the poultry breeders of France in regard to the comparative merits of the Asiatic breeds and their own, is that the former as layers, as sitters, as nurses and as table birds, are inferior to the the native French fowl; that it would be a mistake to substitute the one for the other; that the crosses take from the French races more advantages than they confer upon them, and that it is most useful for them to retnrn to the indigenous races, and spend their care and their experiments in improving them by better keeping, by better selections, and by crossing them among themselves.—*Massachuetts Plowman.*

CABBAGES.—One of the greatest difficulties encountered in raising cabbages, is the ravages of the cut-worm. We have completely outwitted them for two or three years past, in a very simple manner. We take pieces of newspaper six inches square, tear a slit in one side to the center and insert the plant. Bring the slit edges together, and place a little earth or a pebble on the corners, and the work is done. A platform of paper is formed around the plant through which the worm cannot penetrate. We did not lose more than two or three plants from that cause the last two years. We always think it a great point gained when an effectual safeguard can be obtained against the ravages of insects, and we regard this as one of the discoveries of the age.—*Maine Farmer.*

A RAILWAY TRAIN STRUCK BY LIGHTNING.—The express train from Berlin, that arrived at 7 P. M. on the 23d of May at Dortmund, was struck by lightning in the neighborhood of Gutersloh. The metallic signal line fixed on the top of the carriages, and extending the whole length of the train, served as conductor of the electric fluid, which injured one of the stokers so severely that his limbs were paralyzed, and some fears were at first entertained for his life.—*London Engineer.*

THE DESTRUCTION OF THE BEET ROOT.—The *Pas de Calais* Society of Agriculture offer a prize of 100f. for the best paper on the worms and insects that attack the beet root, and the means of preserving the latter from their depredations.

THE work of stretching the wires for the telegraph by Behring's Straits has been commenced.

ISSUED FROM THE UNITED STATES PATENT-OFFICE
FOR THE WEEK ENDING JUNE 20, 1865.
Reported Officially for the Scientific American.

☞ Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying size of model required and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

48,249.—Constructing Gun Barrels.—Ethan Allen Worcester, Mass.:

I claim splitting a twisted rod through the center, and bringing what was the inside of the rod on the outside of the barrel, substantially as specified and for the purpose set forth.

48,250.—Car Spring.—T. F. Allyn, Canandaigua, N. Y. Antedated March 28, 1865:

I claim the construction of a metallic car spring with square or rectangular plates, B, curved diagonally, and fastened together alternately at the corners with the rivets, d, substantially as described in my specification, and for the purpose set forth.

48,251.—Artificial Leg.—John J. Austin, New York City:

I claim, First, Sinking the edge of the thigh socket to fit to the os-innominatum, substantially as and for the purpose set forth.

Second, The double stops of the knee joint produced by the stud, c, the edges, e f, of the slot, e', and the end, g h, of the thigh, B, and leg, C, substantially as and for the purpose described.

Third, The combination of the elastic segment, k, and spring, i, with the stud, c, and with the knee joint, substantially as and for the purpose specified.

Fourth, The two stops, n o, and abutment, p, in combination with the spring, g, in the ankle joint, constructed and operating substantially as and for the purpose set forth.

48,252.—Coal Stove.—Robert Bailey, Cleveland, Ohio:

I claim, First, So constructing the fire box that the fuel is consumed just in the rear of the same, when said chamber is arranged in relation to the ash-pit, F', air chamber, F, and damper, L' and H' substantially as set forth.

Second, I claim arranging the fire box, E, in front of the stove, in combination with the hot air chamber, F, the draft pipe, J, and diving flue, a, as and for the purpose set forth.

48,253.—Stove Pipe Water Heater.—John Baumeister, Detroit, Mich.:

I claim a stove pipe water heater above set forth, constructed substantially as and for the purpose above described.

[This invention consists in a novel construction and arrangement of part of a stove pipe, whereby it is formed into a heating drum, whose shape is such as enables it to embrace a movable water vessel, wherein water can be heated by means of the heat of the products of combustion and hot air which pass through the stove pipe.

48,254.—Regulator for the Wicks of Lanterns.—Henry W. Bleyer, Buffalo, N. Y.:

I claim the rod, E, provided with an oblong slot, c, and fitted on a pin, a, or arranged in any suitable way so as to have a requisite degree of longitudinal play or adjustment, in combination with the toothed wheel, D, on shaft, C, all arranged substantially as and for the purpose specified.

[This invention relates to a new and improved means for regulating the wicks of lamps for lanterns, whereby the wicks may be raised and lowered without removing the lamp from the lantern and with the greatest facility.]

48,255.—Means for Manufacturing Baskets.—Ernst Bredt, New York City:

I claim a basket formed by pressure between heated dies, of a sheet of material suitably prepared with sizing, stiffening or moisture, substantially as specified.

48,256.—Apparatus for Testing Milk.—Chas. S. Brown, New York City:

I claim, in combination with the test tubes, a permanent or movable scale to measure and compare the depth of cream or other matter in each tube with that in the other tubes, substantially as described.

48,257.—Calipers.—Clarence E. Brown, Florence, Mass.:

First, I claim attaching a movable scale to a calipers, substantially as and for the purpose above described.

Second, I also claim constructing a registerng calipers, so as to be self-adjusting, by means of its index and a pin upon the movable scale, substantially as above described.

[This invention consists in making a self-adjusting, self-registering calipers. Its points project toward each other from the ends of its legs, and the line of their projection is in the arc of a circle drawn from the center of the calipers, so that the wear of the points does not shorten the radius. A scale for indicating the measurement is attached to the body of the instrument, and it is made movable therein, so as to enable one to adjust it to a new position as the points of the legs wear away.]

48,258.—Device for Boring and Excavating Coal.—Andrew Buchanan, Brooklyn, N. Y. Antedated June 15, 1865:

I claim, First, The longitudinally-adjustable revolving cutter bar, D, in combination with the self-feeding truck, A, constructed and operating substantially as set forth.

Second, The use of sectional cutters, E, in combination with the revolving cutter bar, D, and truck, A, constructed and operating substantially as and for the purpose described.

[This invention consists in the employment or use of a revolving longitudinally-adjustable cutter, in combination with a truck, to which feed motion is imparted by the same power which is applied to impart motion to the cutter bar, in such a manner that by the action of the cutters inserted in said cutter bar a narrow ditch of any desired length and of suitable depth can be cut in an embankment of coal, limestone, or other similar material in a horizontal or inclined direction, and the labor of excavating coal or other material is considerably reduced. The cutters are arranged in sections, which are secured to the bar in equal lines, so that the material to be excavated has a chance to clear itself, and the action of the cutters will not produce an injurious strain on the cutter bar or other parts of the apparatus.]

48,259.—Lathe Chuck.—S. B. Burritt, New York City:

I claim the combination of the radially movable clamps, H H,