## 386

# Scientific American.

### Miscellaneous.

The Introduction of Carrige Making in Newark New Jersey

The following from the Newark Advertisen is interesting because it informs us how a very important branch of foreign manufacture was copied successfully and the same thing can be done with other branches, which we have not commenced to manufacture yet, such as fine linen goods, watches &c. :-- " The first vehicle known to have been made here, were the old fashioned Windsor chairs upon wooden springs, rudely constructed, entirely without ornament, and little better than an ordinary lumber cart, though appropriated to more dignified uses. Sixty years ago, no four wheel pleasure carriages were made here so far as is known. Soon after that however, one David Ross came from New York and commenced coach making, and produced the finest one known to have been made, for the family of Kearney's. It was without any of the carved or ornamental work made now-a-days, but plain and substantial in all its parts. Soon after this experiment, for experiment it was, an English coach was brought into the city by one of the ancient family of Kemble's, having been purchased in Philadelphia, and its appearence excited a good deal of curiosity; particularly that of the venerable Robert B. Canfield, now living at an advanced age, and who had but just then commenced business, and whose skill had been confined to vehicles of the most humble pretentions. He took patterns of its several parts, examined minutely its ornaments and such work as was entirely new here; and at once determined to imitate it. Being without the necessary impliments to fabricate the finer parts, he set out on foot for New York, and in the evening returned with all the needed tools, with which he soon commenced the work, and soon produced a coach as nearly like the English one, as circumstances would then permit. He took it to New York, and offered it for sale as his own manufacture. This they utterly refused to credit; a carriage of such skillful workmanship they thought could not have been made in an obscure village; Elizabethtown had produced something of the kind, but Newark was unknown as having ever attempted the production of such work. It was sold, however, and the proceeds formed his first capital of any moment, in the prosecution of this now important branch of industry in this city. From this small begining has grown a business which has given this city as wide spread fame in that peculiar branch, as is Manchester for its cotton manufactures, and Sheffield for its cutlery. From the work shops here have gone the ponderous English family coach; the gaudy and unique Spanish volante; the diligence of continental Europe, and the light convenient family coach, with which have been supplied the ancient families of the Poinsett's, the Pinkney's, the Pickens's, the Kershaw's, &c., of South Carolina, as well as those of note here and elsewhere. Improvement after improvement, has been made, until at this day Newark may challenge any city of our er any country to a successfull competition.

The Library of the University of Vermont at Burlington, is probably the best library of its size in the country. It contains 10.000 volumes, which were selected with great diserimination by Prof. Torrey, an accomplished scholar and a man of fine taste. They are chiefly foreign editions and are generally elegantly bound. On the departure of the Hon. George P. Marsh, of Burlington, for Constantinople, he deposited his valuable collection of Icelandic and Scandinavian works in the University Library. This collection, which is the richest of its kind in America, contains 4,000 volumes-so that the University Library now contains, in all, 14,000 volumes.

We see a paragraph going the rounds about an escaped slave having discovered an imporchange his dusky skin for a white one. Some people may believe this fudge to be a fact.

Col. Hamilton's Mode of Cultivating Cotton.

The following process of cultivating cotton, pursued by a veteran sucsessful planter, is taken from De Bow's Commercial Review, and will be found to possess much interest to those engaged in the culture of cotton :-

He says it is more convenient to plant in the middle, but better to plant in the old bed. When he manures he runs a furrow on the old bed, puts in manure in the common way, throws two furrows on the manure and lets it lie till planting time. At planting time he breaks out the middle, which makes his ridges fresh again. But when he plants land not manured, he runs no centre furrow to bed on, but simply laps two furrows on an broken ridge, which he leaves hard; this he does early in the spring, and at planting time breaks out the middles, as he does with land manured.

His planting time is from the 4th to the 10th of April, which he does by making a slight furrow on the ridge with a small gofer. Then, entering so largely into its composition, and stalactites. In one place they observed a after the seed are wet and rolled in ashes, he more of nitrogen, &c., is the more appropriate waterfall, which, so far as the sound and the has them droped in the furrow at the rate of substance upon which the people of the South- light of their torches would enable them to two bushels to the acre, covers with a board ern States, and particularly those laboring in judge, must have been sixty feet high." with a notch cut in the centre, and don't strike situations exposed to increased heat, should

So soon as the cotton is up, so that you can see generally along the row, he runs around it with a plow with a board so fixed as to throw the dirt away from the young cotton and let the sun to the roots. Then as soon as the third leaf can be seen in places, he begins to hoe to a stand, and lets all other farm business wait till he gets his whole crop to a stand.

The third leaf is usually seen between the 10th and 15th of May, and by the last of May he has it all brought to a stand. If this be done by the last of May he thinks his crop pretty well made.

Thinning to a stand, he means to bring it all to one stock in a place, ten inches apart on poor land, fifteen inches on better, twenty inches on rich or manured land. He is very particular to leave no more than one stalk in a place.

The first hoeing commences with the apearence of the third leaf, which generally will be about two weeks after the running round. This hoeing should leave no grass. In about a week after the hoes start, the plows should follow, and with a mould board, throw about as much earth to the cotton as the hoes have taken away. Then the buzzard follows and bursts out the middles. He continues working in the same way throughout the crop, that is, the hoes going before and the plows following, and lays by the middle or 20th of July. He plants the white seed.-

#### Provisions for Fleid Hands.

The following, from the Southern Cultivator, should arrest the attention of all our agriculturists .-

"An erroneous impression under which the planters of this country have long labored is, that pork-and the fatter the better-is the only proper substance of animal food for negroes. That they require, by reason of their cold phlegmatic temperament and peculiar organization, a warmer and more substantial diet than the white race is freely admitted; but that they must have, of necessity, under a burning sun, an article of such stimulating, and yet non-nutritous nature, must be as positively denied. Physiologists, and Pathologists, from whose experiments and patient inquiries all our notions of health and disease are directly and remotely derived, all concur in the opinion that fat and oils of all kinds, as well as sugar and the non-azotized vege tables generally, which are converted into oil process, and we endorse what our corresponsuch, are the less, if not the least nutritous [tor.] articles of food-that they are deposited in the unoccupied parts of the system as fat, the requisite quantity of carbon necessary to the processes of respiration, and the generation nourishment to the tissues, or contributing in those living upon it, instead of becoming mus- rocks from one another.

cular and of rigid fibre, are rendered bulky and imbecile-the muscular tissue being disintegrated, and absorbed to supply the nutriment lican, writing from Sharon, in the State of demanded by the system, and adipoise matter 'New York, remarks that two men, digging a deposited in its stead. But this is not the a drain last week about half a mile from the only injurious effect of living upon oily sub. Springs, came to a large fissure in the rocks, stances. In order that the fat be digested, which led them into a cave; "that they enit is necessary that bile be thrown into the tered the opening, and soon reached an offset stomach, an organ in which in health it should of fifteen or twenty feet which they descended, never be found, and thus a qualmish state and and after proceeding a short distance came perverted action of the same is brought about, to another offset similar to the first, which much to the detriment of health and physical they descended in like manner, and at once enjoyment; besides, from the great heat ev- found themselves in a room some twenty feet volved in the recesses of the body from the square and sixty feet high, with a tunnelcombustible material afforded by an oil diet, bi- shaped roof; that a little further on they dislious and inflammatory diseases are generated, covered another room of about the same particularly those conditions ending in fevers; dimensions as the first; that they found a and our negro population, in the summer and succession of such rooms of different sizes; fall months, is swept off as with a "besom of and that they thus went on for the space of destruction." It follows, therefore, that beef, three hours, traveling at least a mile under or any article which affords a lessened quan. ground. They state that they found the cave tity of oil, or the injurious element carbon, on every side hung with large and brilliant subsist.

#### Substitute for Blowing Rocks.

"We have before published a recommendation of building fire on rocks desired to be broken, as a substitute for blowing with powder, but the following article from the Albany Cultivator points out the way of doing it, and the advantages thereof so clearly, that we copy it for the benefit of our farming friends.

In 1843 we were clearing a piece of ground of stone by the aid of a drill and powder. One very cold day a fire was built upon a rock, which was, perhaps, four feet in diameter, near the wall where we were at work. By means of heat, there were large scales loosened asmuch as the fourth tube being out of order, with the crowbar, and used for filling up the centre of the wall.

the same rock, and sometime after, the scales theless 651 lbs. of juice were extracted for being removed, it was ascertained that the 100 lbs. of cane in 44 seconds. The third exrock had been broken through in two different periment was made on 100 lbs. of cane out directions, dividing it into four nearly equal parts.

them admirably for laying into the wall. From | tance and utility. Besides this it was disthis time henceforth, the drill was dispensed with. Experiment showed that one man could carry a quantity of wood sufficient to break any rock which a farmer might be desirous of removing from his fields. Another great ad- important advantage, as it is there that the vantage was, the wood of little value, such as green wax and other objectionable matter is old pieces of rails, stumps, and the like, might contained, and it is there that the old roller be used with advantage and economy.

lected, if success is expected; that is, to keep feetually obviated by this new process. the rock clear of shells while heating. To do this with facility, the tools required are a sharp crowbar and a pair of large tongs. As soon of a foreign origin. If the above is true in as any shells are found to have started up, the fire should be removed with the tongs, and the ribbon cane contains 88 per cent. of juice; the scales carefully taken off with the crowenr. Creole cane 86 50, the Otahite cane 85.67. This is the only secret in the process. The object is that the heat be applied to the solid rock. The fire should then be replaced with the tongs, and so on till the stone is broken. Throwing on cold water is superfluous. One man can attend twenty of the fires, or one man can perform as much work in this way as ten with drills. The beauty of the process is that it is performed comparatively without danger or expense.—Dennis Johnson.

Mt. Airy Ag. Institute, Pa., 1850."

We have seen rocks broken by the above in the stomach, and absorbed and deposited as dent says in regard to it.-[Albany Cultiva-

it had described the kind of rocks which were and that this fat is only intended to supply split by building fires on them. A man might build fires till doomsday on the solid brown sandstone stratum of Connecticut, and not be usual its literary character is superb ; the engravings of animal heat, without affording adequate able to split a single slab. Fire can only be are also commendable. effectual in splitting fractured stratified rocks, sufficient degree to the restoration of that waste and in this case it is reasonable enough, for publication, just commenced, under the charge of

A Cave Discovered At Sharon. A correspondent of the Springfield Repub-

#### Valuable Invention.

The sugar growing interest, as well as consumers, will be interested in the fact, that a new process has been discovered by which the production of that article can be increased fully one-third. The machine is a square iron box, containing rollers, which are put in motion by steam; this is all the description we can give at this time. Its practicability has been tested at Kingstown, St. Vincept, and it has been found to work admirably. The first experiment resulted in completely abstracting the juice from 100 lbs. of sugarcane in 63 seconds, which was not an exhibition of the uttermost power of the engine, inon the top of the rock, which were taken off | consequently only three-fourths of the actual power was exhibited. A second experiment was made on canes cut four months, of which Subsequent to this, a fire was built upon | much of their juice had evaporated-neveronly one month, and in 36 seconds 784 lbs. of juice were obtained, which is an im-The quarters being left with face sides, fitted : provement unexampled in magnitude, importinctly shown that while the new mode of pressure extracted so completely the juice of the interior of the cane, its knobs and rind were left completely untouched, which is an machine unfortunately pressed—a difficulty There is one point which must not be neg- insurmountable in the roller system, yet ef-

[The above we extract from an exchange in which it was not original, as it bears marks every respect, the invention is a good one. The

### The Calhoun Statue.

The famous marble statue of the late John C.Calhoun, executed by Powers, which was lost by the wreck of the brig Elizabeth, has been found, and in a state of perfect order.-Measures have been taken to raise it by submarine armor.

#### LITERARY NOTICES.

Shakespear's Dramatic Works, No. 21, Phillips, Sampson & Co., publishers, Boston; for sale by Dewitt & Davenport. It contains the play of I ry V., embellished by a portrait of Princess Katharine of France.

We are indebted to Messrs. Dewitt & Davenport [The above would have been more useful if | for the September No. of Graham's popular Magazine. It is well illustrated, well edited, and well printed. In short it is not easy to excel it in interest. The same publishers have also sent us the September number of the Ladies National Magazine. As

"The Arts' Echo," is the title of a new monthly an escaped slave having discovered an impor-sufficient degree to the restoration of that waste and in this case it is reasonable enough, for particular, just of messrs. Kingsley & Longbottom. It is devoted tant herb by which he has been enabled to and decay of the same which is constantly the heat of the fire expands the moisture in or fine sufficient degree to the restoration of American and Foreign going on, and which exercise increases, so that the seams, and thus separates the fractured Patent Laws, and a review of the Arts and Sciences. i Terms \$1 per annum.