

## MISCELLANEOUS.

## The Food of Man.

Bayard Taylor, now travelling in Africa, presents a very different opinion upon the vegetable and meat-eating natives, than that which vegetarians promulgate; they boast of the superiority of the rice and milk eaters. Taylor boasts on the opposite side of the road. Here is what he says:—

"The scenery of the Nile, southward from Shendy, is again changed. The tropical rains, which fell occasionally at Abou-Hammed, and scantily at Berber, are here periodical, and there is no longer the same striking contrast between desert and garden land. The plains extending inward from the river, and covered with a growth of bushes and coarse grass, which also appears in patches on the side of the mountains. The inhabitants cultivate but a narrow strip of beans and dourra along the river, but own immense flocks of sheep and goats, which afford their principal sustenance. I noticed a new kind of grain called "dookhu," of which they plant a larger quantity than of dourra. It is a germinaceous plant, somewhat resembling "timothy grass," but with a larger head and heavier seeds. They make from it a coarse, black bread, which they say is more nutritious than wheat. Mutton, however, is the Ethiopian's greatest delicacy. Notwithstanding this is one of the warmest climates in the world, the people eat meat whenever they can get it, and greatly prefer it to vegetable food. The sailors and camel-drivers, whose principal food is dourra, are, notwithstanding a certain quality of endurance, as weak as children, when compared with an able-bodied European; and they universally attribute this weakness to their diet. This is a fact for lank Sylvester Graham to explain. My experience coincides with that of that of the Ethiopians, and I ascribe no small share of my personal health and strength, which the violent alternations of heat and cold have not shaken in the least, to the fact of my having fared sumptuously every day. If I had adopted a diet of rice and water, or bran and turnips, I should not be here to give this testimony."

## Great Suspension Bridge.

There is about to be commenced, in the neighborhood of Dirchau, in Prussia, a suspension bridge over the Vistula, which will be unquestionably the largest that has ever been constructed in Europe. The United States alone possesses one of the like colossal dimensions. This bridge, over which will pass the railway of the State, will be 2,500 feet in length, and 63 feet in breadth, and will be supported by six pillars, at a distance of 500 feet apart, four of which will be fixed in the bed of the river. The construction alone of this colossal bridge will cost 7,700,000 fr., and the works to be erected on the two banks will amount to 11,400,000 fr., in all 19,000,000 fr. — [Exchange.]

[There is a great mistake in the above paragraph. The greatest suspension bridge in America (Wheeling), is over 1,000 feet span, while the Prussian one is to be only 500 feet span. The whole of the bridge, however, is to be longer than the Wheeling one, but Telford's Bridge over the Menai Straits has a middle opening of 580 feet, and the Freiburg Bridge has a span of 870 feet, so these two bridges have greater spans than the Prussian one is to have. We have seen it stated that the Hungarian suspension bridge over the Danube, erected by J. Clarke, was the greatest work of the kind in the world.]

## A New Idea in Agriculture

The steward on board a United States steamer, in the Gulf, has produced several crops of excellent potatoes by the following mode of cultivation:—

"He procured a common 'crockery crate,' a bundle of straw, and a few eyes of the potato, and went to work farming it on board ship! The process for cultivating them is this:—Fill your crate with alternate layers of straw and the eyes of the potato, commencing at the bottom with a layer of about six inches in depth of straw, and then a layer of the eyes—the eyes being placed about two inches apart over the surface of the straw—

then another layer of straw on the top. Keep the straw always moist, and in about two months you will have about \$14 worth of sound, good potatoes of the 'first water.'"

## Exposition of American Products and Industry.

For the first time since we have spoken of the American Institute Fairs and their management, in deserving terms, we have been honored with a printed circular, announcing that its twenty-fifth Annual Fair will be held in Castle Garden in October next. Articles intended for exhibition will be received on the 1st, 2nd, and 4th days of October, and the Fair will open on the 5th. We suppose, from the fact of our having received this Circular, that we are again in favor with the Institute. We have advertised it gratuitously every year, and shall continue to do so, with the full belief that our influence among the mechanics and inventors of the country tends materially to enhance the character of the exhibitions.

The Circular sent us contains this announcement:—"The American Institute has been the pioneer in movements designed to advance the manufacturing and mechanical interests of the United States, to improve its agriculture, and to improve the condition and elevate the character of its laboring men. It pledged itself, in its earliest address to the public, to stand firmly by these interests, and for a period of twenty-five years it has kept its faith with the public, inviolate."

Every word of which we sincerely believe to be without a shadow of truth, and exhibitors every year are numerous to testify to the fact. What has the American Institute ever done to deserve the patronage of American manufactures and mechanics? With the aid of Lord Ross's mammoth telescope, we imagine it would puzzle any man to discover any thing. The parallel between the management of this and the Maryland Institute, hitherto, is immensely in favor of the latter, as the published proceedings show. The scheme of the Crystal Palace, however, has infused new vigor—strange to say—into the concern, and the public may expect an exhibition this Fall never before surpassed,—they may also expect courtesy and attention from the managers—something which must not be omitted this year, or this may be the very last chance for them. Now, let us all unite together and give the American Institute a grand lift.

## Fire and Water-proof Preparation.

Slake common stone lime in a close vessel, and when cool pass eight quarts through a fine sieve; add to it one quart of fine salt and two gallons of pure water. Boil and skim. Then, to every four gallons of this mixture, add one and a quarter pounds of rock alum, three-fourths of a pound of copperas, half a pound of potash, and five quarts of fine beach sand. This wash will now admit any coloring matter that may be desired, and may be applied with a paint or whitewash brush, in the same manner as oil paint. A writer remarking on the good qualities of this preparation for roofs, says,—"It looks better than paint, will stop leaks in the roof, prevent moss from growing, and when laid upon brick work will render it impenetrable to rain or moisture." A wash of this kind might be beneficially applied to the roofs of houses, &c., instead of paints.

## Death from Toothache.

The Poughkeepsie Press gives an account of a singular death in that place of a young man, apparently about 27 years of age. He came to that village, stopped at Cary's, and at the time was suffering under a toothache, swelled face, &c. He had a tooth extracted, but continued to suffer most horribly for a short time, when death ensued.

## Coal Strata.

The parallelism of the coal deposits of Europe and the United States, is a favorite theme for investigators. At a recent session of the Natural History Society, at Boston, Prof. Rogers and Mr. Desor communicated some results which invalidate the conclusions arrived at by M. Elie Be Beaumont, in his essay on the "Ancient Mountain Systems of Europe." According to our home authorities, the epochs of disturbance in the great Apala-

chian chain of this country and the anthraciferous strata of Northwestern France, are dissimilar; an opinion contrary to the arguments of the French savans.

## Lightning Protector for Telegraphs.

H. C. Turner, of Cheraw, S. C., has taken measures to secure a patent for an improvement in Telegraph apparatus to protect the magnet of a telegraph instrument from being destroyed or injured by lightning, as well as to enable telegraph operators to continue at work during the prevalence of atmospheric electricity, which often causes great trouble and delay in the southern latitudes. The principle of the improvement consists in having a medium connected with the ground and telegraph line, which will conduct electricity of great intensity, but not that of low intensity, as generated by the galvanic battery, thus carrying off the atmospheric electricity without interrupting the circuit. He employs two small brass cylinders, each of which has a wire running from a connection screw at the middle, while the circuit wire runs through. Each cylinder is separated at each end by a piece of ivory, or other non-conducting substance, and the only communication with the ground is obtained by some partial conducting substance, such as ground charcoal. With this, each cylinder is filled, therefore an intense electric discharge, is carried through this medium to the ground, and the magnet is protected. The invention is simple and new to us, and we understand it has been used in the Telegraph Office, at Cheraw, for two months, with complete success. It is constructed on scientific principles.

## Comets and Planets.

We do not know what will have to be done with all the comets and planets. Every few weeks we hear of a new comet being discovered, and no later than the 29th ult., Prof. Bond, of Cambridge, Mass., discovered another. In the early part of April it approached close to the earth's orbit. It goes at a tremendous speed, running through 100 degrees of right ascension in 24 hours. Two small planets, "Irene" and "Eunomia," were discovered last year.

## Maryland Mechanics' Institute.

The Fifth Annual Exhibition of the Maryland Mechanics' Institute will be opened in the city of Baltimore on the 4th of October ensuing, in the splendid new hall illustrated in No. 4 Vol. 7, Scientific American. The exhibition is expected to continue one month, and we have no doubt it will constitute an object of national attraction. Exhibitors are sure of meeting with respectful and courteous attention from the board of managers to an extent not very common among us, we deeply regret to say. We however hope for better things this Fall, and if we realize them, the credit will be due to the projectors of the anticipated Crystal Palace Fair. Inventors, Mechanics, and Manufacturers don't forget the Maryland Institute.

## Brass Beadsteads.

The latest English advices state that there is a great demand for brass beadsteads of almost every description of make. At Birmingham they had on hand large orders for this branch of brass foundry. The brass beadsteads have, indeed, within the last two years but more especially since the great exhibition, become a very important item of export by Birmingham merchants, and appear to be eagerly sought for in the North and South American markets.

## Milwaukie Water Works.

The Lake Michigan Hydraulic Company, of Wisconsin, are about constructing water-works to supply the city of Milwaukie with water. The company has engaged the services of Theodore R. Scowden, present engineer of Cincinnati Water-works, to plan and construct the work. The erection is to commence next summer (1853), and to be forced through to completion with all possible vigor and dispatch. Mr. Scowden has recommended two pumping engines of 120 horse-power each, capable of forcing, in 24 hours, 7,000,000 gallons of water into a reservoir containing 15,000,000 gallons when full, which are to be elevated 125 feet above the surface of the lake.—There will be ten miles of distributing water-

pipes laid for a beginning, varying in their bores from four to sixteen inches diameter. To insure a constant supply of water beyond any possible contingency that may arise, the pumping and attachments, with the reservoir, will be duplicated in every particular. No pains nor expense will be spared to make the work, in all its requisites, equal to any other of a similar character in the Union, at a probable cost of \$325,000.

## A Phenomenon in Hydraulics.

Buffalo, June 1.—This morning, about 8 o'clock, while the workmen were engaged in pulling down the walls of the Old Eagle Theatre, a portion of the back wall came down, falling into a pool or spring at its base, whereupon a column of water burst forth to the height of from 200 to 300 feet. So great was the force, that at the distance of 90 feet from the pool, Mr. Ladd, who was superintending the removal of the dirt, was thrown a distance of 15 feet, and lodged in a pile of bricks. The water crossed Eagle street, throwing down about 40 feet of fence surrounding Mr. Arthur's garden, and uprooting in its course several trees and shrubs in the garden, besides doing considerable other damage. Fortunately the torrent was somewhat arrested by a large pile of bricks on Eagle street, but for which more serious consequences would have ensued. Mr. Ladd, although not seriously injured, is considerably bruised.

[The above has been denominated a phenomenon in all the papers in which we have seen it published. It is easy to account for all that was done; the falling of the wall—its gravity—was the cause of the water being forced so high and with so much power.]

## The Profits of Patents.

The following will give some idea of the profits derived from the Woodworth Planing Machine during the twenty-four years the patent has existed:—James G. Wilson has received, in sales, assignments, and tariffs, \$2,131,752; John Gibson, of Albany, has received nearly as large a sum; Charles Gould, of Albany, has also received a very large sum. Gibson, it is said, is in the receipt of \$1 for every 1000 feet planed in 100 mills, each of which turn off 10,000 feet each day. — [Pamphlet on the Woodworth Patent.]

## Immense Contract.

A contract for building the Terre Haute and Alton (Ill.) railroad has been entered into by Messrs. Willis Phelps, Wm. Mattoon, and James Barnes, of Springfield, Mass. This road extends 175 miles, entirely across the southern part of Illinois. These gentlemen have contracted to build the road, furnish the iron, build the depots, cars, locomotives, &c., putting the entire road in running order within three years, for the round sum of three million of dollars. The route is comparatively an easy one, and it is believed that the road will be completed within two years.

## Coffee.

The production of coffee in Brazil the past year, has been 1,700,000 bags, or 272 millions of pounds. In 1820, the production was 15 millions of pounds.

Among the recent discoveries at Nineveh, one coffin contains the body of a female of the royal line. Many of her garments were entire, as were the gold studs which fastened her vest. The most singular discovery was a mask of thin gold pressed upon the face, so as to assume and retain the features of the deceased.

The British Admiralty, always alive to the exigencies of the sea service, have published full directions for signal lights to be carried by all British vessels at night on the ocean and which, being worked uniformly by a code, will render collisions nearly impossible.

Gen. Pierce has been nominated by the Democratic Convention assembled last week in Baltimore, for the next President. The next election will be an exciting one.

The average duration of life among Prussian doctors is 34 years. There are few old doctors living.

Carbonate of lead is said to be excellent for burns.