

## Miscellaneous.

Correspondence of the Scientific American.

WASHINGTON CITY, May 14, 1850.

The fire-proof tiller rope invented by Dr. Johnson, of New Orleans, is highly spoken of here, where it has been tested. As the law of Congress, relative to iron chain and wire tiller rope, has long been a dead letter, this invention will prove of great value. I understand the Navy Department are about to contract for a large supply.

During the last week about half a dozen memorials have been presented from patentees, asking a continuance of their patents beyond the terms allowed by law. There is, however, on the part of the Patent Committee, a strong feeling against such application, inasmuch as they are averse, unless in extreme cases, to intermeddle with the affairs of the Patent Office.

Professor Rogers is drawing crowded audiences to hear his lectures on Geology at the Smithsonian Institution. He advances many new theories, and supports them with strong arguments. At his last lecture he contended that the body of the sun is a mass of fluid lava, and the spots are caused by the condensation of portions of the fluid mass. His theory of earthquakes is, that they are caused by the waves of lava which constitute the interior of our globe, and that the undulating chains of mountains are the result of the upheaving and forward motion of these waves.

The Printing Committees of Congress are endeavoring to expedite the printing of the whole of the Patent Office Report, but with very little chance of success. The fact is, the amount of printing ordered at the present Session will, when completed, exceed half a million of dollars, and the work being confined to a few persons, renders its progress ruinously slow.

The House having agreed to the Senate's amendment to the Deficiency Bill, the eastern wing of the Patent Office building only will be finished at present. The second story is already for advanced.

The Third Annual Exhibition of the Maryland Institute is announced to take place at Baltimore in October. Mechanics and manufacturers throughout the United States, are invited to exhibit specimens of their handiwork, and to become competitors for the prizes.

There are numerous enquiries after Mr. Porter from the subscribers to his balloon stock. They think that unless he hurries himself, all the gold in California will be gone before he can convey them there.

A new scientific monthly publication commenced here about three months ago, has given up the ghost.

About twenty acres of the ground of the Smithsonian Institution have been manured and sown with oat, which have grown about a foot high, so that a beautiful contrast is afforded to the former desert of red sand. Over a thousand young trees have also been planted.

A scientific gentleman, speaking yesterday of the human eye, described it as the sentinel which guards the pass between the worlds of matter and of spirit.

From present indications the nomination of Mr. Ewbank will not be acted upon until it shall have been ascertained how a certain friend of his in the Senate will vote on the Compromise Bill.

By an old Post Office document, I see that the first stage between New York and Boston commenced on the 24th day of June, 1772, to run once a fortnight, as a "new, useful and expensive undertaking." The trip occupied thirteen days. The first stage between New York and Philadelphia commenced running in 1756, and occupied three days. In 1785 an act passed the Legislature of New York, granting to Isaac Van Wyck, and others, an exclusive right of keeping stage wagons on the east side of the Hudson, between New York city and Albany. What a revolution has been wrought in a few years, originating with the man described in your last number as sitting in his obscure room at Paris, with the rough figure of a steamboat marked on the wall. Ver-

rily, Fulton carried within him a spark which has lighted the world! \*

## Unrolling a Mummy.

The "Traveller" says that Mr. Gliddon, the Egyptian traveller, who is now lecturing in Boston and exhibiting his Panorama of the Nile and various curiosities illustrative of the past history and present condition of Egypt, offers to open one of the mummies in his collection, if a suitable subscription can be raised. This mummy is the body of the daughter of a high priest of Thebes who lived more than 3,000 years ago, or about the time of Moses. It is one of the most valued specimens of the curious art of embalming, and its market value is said to be about \$1,500. Mr. Gliddon proposes to devote three lectures to the work of opening and explaining this mummy, if the needful number of subscribers can be obtained. The plan is, to secure 300 subscribers, at five dollars each, which will entitle the subscriber to four tickets of admission to each of the three successive lectures to be given in connection with the opening of the mummy. The process of unrolling the body is to be conducted under the supervision of several of our most distinguished surgeons and physicians. A larger number of our wealthy and influential citizens have already given their names to encourage this curious and interesting undertaking, and we cannot doubt that the requisite subscriptions will be obtained so soon as a general opportunity is offered to our citizens to express their interest in this enterprise.

## Practical Engineers for Steamboats.

"On the 30th of March the Philadelphia encountered a severe gale, about fifty miles from Jamaica, which lasted until the 6th of April, on which day the rock shaft, on the ambrosial engine, broke. Disconnecting the engine, the engineers worked the larboard engine until the next morning, when its rock shaft also broke. The engineers were then compelled to work the engine by hand, until they reached Chagres, a distance of some seven hundred miles, the thermometer standing, during the time, in the engine room, at 120 degrees. Reaching Chagres they obtained an old anchor, which, by the means of a furnace built upon the beach, without a forge, they managed to manufacture a rude shaft; a bar of iron used to fasten the life boat they converted into another. A spare crank furnished the means of making the toes. Being without lathes, on their return to the steamer, they chipped and filed the shafts to suit their purpose, and then sailed an hour and a half after the Crescent City, arriving here three hours before her. The work, of course, from the want of proper tools, was rudely done, but it answered the purpose admirably.

## Taxes in Great Britain.

WINDOWS.—The amount of window duty paid in Great Britain, last year, was \$9,066,145.

NEWSPAPERS.—For England the stamp taxes on newspapers, for 1849, was \$1,485,710; for advertisements, \$640,265,000; Scotland, or stamps, \$152,720,000; advertisements, \$60,000. Ireland, stamps \$132,780; for advertisements, \$55,000. Ireland stands lower than Scotland in the amount of taxes paid for newspapers, yet she has 117 papers, Scotland 94. The population of Ireland is about 3 to 1 in Scotland. Which country is taxed most?

## Starch Manufactory.

The Albany Journal states that there is an immense Starch Factory at Oswego, producing the following results:—It consumes 2,000 bushels of ripe corn per week, and manufactures 40,000 pounds, or 1,000 boxes of starch during the same time. There are 11 furnaces, with corresponding drying rooms, and 200 cisterns for receiving the starch in the fluid form. The number of men occupied is about 70, and the value of the starch annually employed exceeds \$124,000.

The steamships Cherokee and Georgia sailed for Chagres last Tuesday, loaded with California Emigrants.

A new Bay, named La Trinidad, has been discovered in California. It has a good northern entrance and a good harbor.

## Animal Life in Water.

A single drop of water, one-twelfth of an inch in diameter, has been known to contain billions of sleepless, animated beings, between whose moving forms there exists not a millionth of an inch. Science has given these the general name of infusoria. These animals are found to be highly organized, and to possess a tenacity of life almost bordering on the marvellous. There are two grand classes of these animals, called the polygastria and the rotifera. These are sub-divided into thirty-eight families, which are still further divided into more than seven hundred species. Many of these are found to have a flinty covering of silex, that in itself is almost indestructible. The polishing slate of Bilin, or tripoli powder, is formed of these shells of flint. Even in the polar regions where no other form of animal life is found, they have been found alive sealed in ice, and capable of resisting cold. Heat does not destroy them.

## Horse Power.

It is well known among engineers that a horse is capable of raising a weight of about 150 lb. 220 feet high in a minute, and to continue exertions enabling him to do that for 8 hours a-day.

Multiplying the number of pounds by the height to which they are raised in a minute, 150 x 220 gives 33,000 lb., and the power of a horse is generally expressed by a sum varying from 30,000 lb. to 36,000 lb., raised 1 foot high in a minute.

N. B. Bolton and Watt express it by 32,000 lb.; Woolf, by 36,000 lb.; Tredgold, Palmer, and others, by 33,333 lb. One horse can draw horizontally as much as seven men.

FRICITION.—In trains of machinery from  $\frac{1}{4}$  to  $\frac{1}{2}$  is allowed for friction.

## Steamship Pacific, the Second of Collin's Line.

The magnificent steamship Pacific, the second of Mr. Collin's Liverpool line of packets, is receiving her engines and boilers at the head of Water street, from the foundry of Mr. Alaire, had steam got upon her yesterday, and she breathed the breath of life for the first time. Her ponderous machinery moved with the greatest precision and ease, and gave perfect satisfaction. She will make a trial trip some day this week, and will take her place at the foot of Canal street, on Monday next, the 20th inst. A large number of passengers have already secured state rooms in her for her first trip.

## Morals in Scotland.

There are sixty-four prisons in Scotland, but one fourth of them are entirely empty, and another fourth contain only from one to half a dozen prisoners. It is now proposed, such is the decreasing demand for prison room, to reduce the number of jails to six. Such is the influence of an all-pervading orthodoxy upon the public morals.

The N. O. Delta believes that cholera, instead of originating in the towns on the Western waters, is caused by the crowded condition of the steamboats, some of which are floating black holes, where the very air reeks with the deadliest miasma, and there is not even space for the most ordinary requirements of human nature.

The advertisement of the "American Union" will be found in another column, it is unqualifiedly one of the best family journals in existence. It is carefully and ably edited by Messrs. G. P. Burnam & R. B. Fitts. An edition of the "Union" will be regularly published hereafter at No. 116 Nassau st., this city, by Fitts, Johnson & Co., where subscriptions will be received at \$2 per annum.

There is a church in Ohio where the water that runs off the roof on one side goes into the Gulf of Mexico, and that which runs off the other side goes into the Gulf of St. Lawrence.

Next week we shall publish an engraving of Wilson's Patent Stone Cutting Machine, on a large scale.

It is reported that an expedition has sailed for Cuba, to revolutionize it. The booty is to be segars.

## California.

The news by the steamers of the first inst., from California, is not at all favorable. The amount of gold dust falls short of the estimates indulged in by our most careful observers, who are largely interested in shipments of merchandise of all kinds, and the price current in San Francisco shows a rapid decline, which bear evidence that a revulsion has already commenced. It is thought that many shippers will not only sink the cost of shipments in this market, but will have to pay heavy charges for freight. Failures have commenced, and a general explosion among the operators of San Francisco must be the result. The enormous value of money—the great demand—the extravagant prices charged for property of all kinds, tends to strengthen the opinion that one of the greatest revulsions ever experienced in any part of the world, will take place. It is entirely out of the nature of things, that such an intense excitement as that which has so far attended all the movements towards California, could continue for a great length of time without resulting in overwhelming reverses,—that crisis has, to all appearances arrived, and many will reap sorrow where prosperity was apparent.

In all the accounts given by the correspondence from San Francisco, although the writers have an interest in presenting a clean account of the state of affairs there, we see no encouragement held out to justify new operations. The result of all this will be that a firmer and more stable business will be established upon the ruins of this crash; but this cannot be expected at present.

By a letter under date of March 22nd, from an intimate friend now transacting business in San Francisco, we extract the following which fully justifies all that we have said upon the subject:—

"The San Francisco of last Fall has departed—that bustling, busy bee hive has ceased working, and the present San Francisco, although crowded with people, is doing but a small portion of the business of last Fall.—Property is every day given away at the auction stores: umbrellas have been sold at \$1.25 per dozen; a large lot of hardware, costing over \$1000 at home, was sold the other day for \$7.50; ships are crowding into port with lumber, which the consignees refuse to pay freight upon in consequence of low prices, and cargoes are sold every day to pay freight. Lumber sold for \$20 per thousand, which cost \$18 at home, and about \$80 to bring out here.—Such are the results of thousands of orders—there is nothing upon which profit can be reasonably insured for 90 days.

Even potatoes, which at one time would command readily \$1 to \$3 per lb., have been rushed into market so fast that they do not pay the expenses of bringing them from the Islands. These circumstances combine to give a sombre tone to business matters."

This plain statement of facts is fully corroborated by other advices, and our opinion is that those who are comfortable here should remain satisfied, and all who are uncomfortable have surely no encouragement to emigrate to California.

The Newark Daily Advertiser, a very ably conducted journal thus speaks of the Scientific American:—"It is always a welcome visitor, bringing a variety of substantial information with regard to the progress of mechanical improvements, condensed into a more accessible form, than can be found elsewhere. It is the best paper devoted to the mechanical interests, we know of."

The Western Journal, a monthly publication of great ability, published by Traver & Risk, of St. Louis, at \$3 per annum, says, in speaking of the Sci. Am., that "this valuable publication comes fully up to all that its title imports; and should be read by every individual who desires to be informed in respect to the improvements of the age."

Summer shawls in Paris are now worn of black silk, with embroidered borders of the cashmere patterns. The borders are twelve inches deep, the embroidering is in bright tints, yellow predominating, giving the effect of gold.