Scientific American.

Misrellaneous.

Foreign Correspondence

London, April 4th, 1851.

An entertainment given to our countrymen on the 26th of last month, at Southampton, by the Mayor and Common Council, was a splendid affair. The person to whom the banquet was more immediately given, was the U. S. Consul, J. R. Crosky; Captain Sands, of the St. Lawrence, together with the other officers of the vessel, was there, and they it was who drew out this demonstration on the part of the magistrates of that place. Our countrymen acquitted themselves handsomely in their speeches. Southampton is the place from which the pilgrim fathers sailed for America, in the May Flower, on the 5th of Aug., 1620, only 230 years ago. What a change! The little handful of religious, self-expatriated patriots has grown into a mighty nation, and it now sends a leviathan of the deep to represent the power, genius, and progress of Ame-

Our countrymen, I believe, will be treated with consideration at the Exhibition, and everything will be done that can be, to smooth asperities. The Queen and Prince Albert have visited the Exhibition Building, and it is stated that the celebrated diamond "Koh-i-noor," (Mountain of Light), which figured at one time in the crowns of the kings of Persia and Mogul, but which is now the property of the Queen of England, and the largest diamond in the world, is to be exhibited, so that all the world may see how the spoils of India are made to garnish the brow of the Island Queen.

In machinery, England will show to advantage. Machinery will be exhibited to show the whole process of cotton manufacture. Nasmyth will exhibit a splendid Steam Hammer. Huge marine, stationary, and locomotive engines are now fitting up-one engine of 700 horse-power, from the old firm of Bolton and Watt. A press is fitting up by Applegath as a rival to the Hoe Press.

The British department is farthest advanced. The manufactured goods will make the greatest display. They are now arranged as follows:-

As regards cotton manufactures, the towns which exhibit to the largest extent are-London occupying 1,652; Glasgow, 1,648; Manchester, 1,431 feet; and Bolton and Carlisle each occupying about 1,000 square feet. In the woolen and worsted manufactures the town of Galashiels is the largest contributor, occupying 2,016 feet of hanging space. The towns next in order are Stroud, Elgin, Kendal, Stirling, Paisley, the Metropolis, and Oxford. The arrangements for the display of the Galashiels tartans are of a superior character. In the class of silk manufactures, the Metropolis contributes the largest amount. Manchester also sends very largely, as does Macclesfield. The show of ribbons from Coventry will be on a very extensive scale. The class of shawls has been added to the silk class, the space required for Paisely shawls being 11,030 feet; for those of the Metropolis 5.788 feet. In the flax and hemp class Belfast is the largest contributor, the next in order being Leeds, the Metropolis, Dunfermline, Barnsley, Dundee, and Bridport. The cities of Glasgow and Dublin furnish the largest proportions of exprints. The largest portion of space in the clothing class is devoted to London, the space occupied being 1,700 feet. Liecester and Nottingham are the next largest contributors.

Among these it will be seen that the north of the island (Scotland) figures considerably. Four places occupy a space of 29,846 square feet. The shawls of Paisely are splendid. They will, it is supposed surpass the cashmere, the French, and German. EXCELSIOR.

GLASGOW, April 3, 1851.

much difference to your farmers, as 5s. per a crank motion overhead, quarter would be placed on foreign wheat, and 3s. or 3s, 6d, per barrel on flour. Colonial would be continued free, or at present rates; but that is the minimum on flour or wheat. I may mention that Lord Stanley is pledged to complete the Halifax and Quebec Railway, -and no doubt exists that it will be done if Lord Stanley becomes Premier.

An unfortunate dispute existed with the committee of the American Exhibitors, of which I cannot tell you the particulars, as these gentlemen refused the press admission to their meetings. I regret that course : parties acquainted with this country know that everything of this kind is managed through the Press. It is doubtful, on subjects of the nature involved, whether, in any country, the opinion of the journals does more to form public opinion than bere. The American exhibitors, so far as I know, fear that if their articles are shown, and not patented, they will be pirated, in apparent forgetfulness that, although they should not be exhibited, yet they will be copied, if they are sold in the United States, and will repay a copyist. Our patent laws are barbarous. The tax on genius, like a tax on knowledge, is ignominy. But the exhibition does not alter the case in any way.

We had a very bad accident at the Nitshill colliery here, 14 days since, and 65 lives were lost. The works were the deepest in Scotland and deemed the most perfect. A model of them was to be sent to the Great Exhibition to show the mode of ventilating. It will probably not now be sent. The cause is un-

A boiler explosion, at Johnstone, a few days afterwards, led to the death of 6 individuals Boilers, I fear, are often not examined with sufficient care. These cases will be investigated by the authorities, as are all such accidents and occurrences now.

We have here an Accident Insurance Co which insures against damage or death by accident. An ordinary individual, for £1 annually, insures £1,000. Dangerous professions, such as mining, railway work, nautical, &c., are insured either individually or the whole of the men on a work, or on a ship collectively, by special agreement, but at low figures.

I see a number of articles in the American press regarding the iron trade of this country and the wages paid. Iron is deplorably low at present, and I should think that the masters generally lose money by the business; but a prevalent error runs through all these articles as to wages, especially if you reckon hours. Colliers and miners seldom worklong hours or more than five days; and I don't suppose that 75 cts., daily, which I see is deemed, by your writers, much above our rate, would be considered good wages here for 60 hours, weekly. Indeed, I am quite confident that for 60 to 66 hours' work, weekly, it would not be taken. lron is cheap, here, because blackband ore and coal, and lime are found together.

Immense Engineering Works.

From the Glasgow North British Mail we learn that there are at Mr. Napier's engineering works, two steam cylinders recently cast, which are for the new Cunard steamers, of larger dimensions than any hitherto made in hibitors in the class of mixed fabrics. Of this country or elsewhere. The diameter inprinted fabrics, Manchester furnishes suffi- side is 103 inches, and the length of stroke a legal investigation will be had. There is no cient to occupy 7,276, Glasgow 5,152, and the about ten feet. The largest hitherto fitted up knowing the extent to which this thievery has Metropolis 4.108 feet. The printed fabrics will in the steamers of this celebrated line was be generally of the usual character of British | ninety-six inches, which is also the size of those on board the Collins' line of American steamers. The largest slotting machine in existence is being fitted up at Lancefield works, by Mr. Robert Napier. Some idea of the immense proportions of this huge mechanism may be formed, when it is stated that the castings forming the machine weigh about 100 tons. It is intended for cutting vertical grooves in large wheels, shafts, &c., and provision is made for screw propeller shafts of the largest size "on end," to have the requisite grooves cut internally or on the surface. When a single Our political condition, here, is likely to be tool for performing apparently a very simple is of the size and color of a hazelnut, and con- tains may be distinctly traced, with the deep changed during the current year: I expect operation weighs 100 tons, the immense mag- tains an oily kernel.

that the next general election will occur in initude of the machinery prepared by it may August or September, and that Lord Stanley's be imagined. The vertical motion of the cutparty will have a majority. This would make, ter is given in the ordinary way by means of

Spontaneous Combustion --- Fortunate Es-

We have been furnished with the following facts: - "The careleseness of shippers in not accurately describing their goods often causes much annoyance and not unfrequently serious accidents. One of the most providential escapes that we have ever witnessed, occurred on Saturday last, in this place. A house in New York had shipped on board the schr. Empire, Captain Bunker, a box of oil clothing, to Mr. John Tatsapaugh, which the bills of lading described as merchandise. It was consequently stowed in the hold, and upon the ton was placed seventeen kegs of gunpowder, and around it some three hundred more. The Empire cleared at New York on Monday afternoon, 1st instant, and arrived at this port on Friday, making the passage in five days. Upon opening the box it was completely charred through, and the box much scorehed, from spontaneous combustion! Had the box remained in the hold a few hours longer, it is probable that a fearful explosion would have been the consequence."-[Alexandria Ga-

[It is well known to scientific men that there is great danger in stowing away goods of any kind, which have been prepared with grease or oil. If merchants would devote a little more time in acquiring scientific knowledge, such as taking a useful paper, reading books &c., they would be great gainers. Every person who uses a saucepan or kettle, should know something about chemistry.-There is an old saying "a little knowledge is a dangerous thing." This is sheer nonsense; knowledge is power, and a man is powerful just in proportion to the amount of knowledge he possesses. A little knowledge, however hittle, is better than none.

Deficiency of Weight in Georgia Cotton.

The Savannah Republican has the following explanation of deficiencies in the weight of cotton shipped from that port:-

The Liverpool correspondents of Messrs. A. Low & Co. have often complained of a material deficiency in weight of occasional bales of cotton shipped to Liverpool, and of the lacerated state of the bagging. The day before yesterday, after some careful investigations, the cause was detected. It appears that white and black stevedores, on board the vesselloading below, have been in the habit of secreting cotton in the mattresses on which they sleep. They take them down empty, and bring them up full when the ships are loaded.

How long this system has been carried on we do not know; but it is certain that it has been practiced to a considerable extent. Sea Island cotton is preferred, as might be supposed, when it can be had, both for its value and on account of the ease with which the bags can be opened. We saw six mattresses yesterday which had been thus packed with cotton. All the cotton in them might weigh one hundred and fifty pounds. The only one which we examined was rather expensively made up with an excellent quality of Sea Islands.

This stealing process is a simple and easy way of getting rich, but we presume that those who follow it will be compelled henceforth to try some other method. We understand that been carried on.

It is probable that from \$15,000 to \$20,000 worth of cotton may have been stolen this season. There is no doubt that every ship loaded for Liverpool this year, has been robbed; and this explains why so many cargoes delivered this season in Liverpool, have fallen short. In many instances several bales of cotton have been missing.

Tea Seed.

and seeds, sent direct from China. The seed

Pacific Railway.

The St Louis Republican publishes the reports of the Directors of the Pacific Railroad Company, made at its meeting on the 31st of March.

Since the organization of the Company, in March of the previous year, instrumental surveys have been made of three routes to the Gasconade river, all of which are practicable; but the line has been located for only about forty miles, it being unadvisable to decide upon the route until another attempt is made to obtain of Congress a donation of land towards the construction of the road. The portion located is estimated at about \$1,000,000, including lands for building at St. Louis, land damages, superstructure, building machinery, and cars.

The amount of private subscriptions to the stock thus far is \$544,100, and by cities and counties \$514,000—making a total of \$1,158,-100, leaving \$341,900 to be obtained to secure the issue of bonds in its favor by the State. The law for that purpose, as it passed the Legislature, provided that when \$1,500,000 of the Company's stock had been subscribed for, the Governor should issue and deliver to the Company \$50,000 of the bonds of the State, running twenty years, and bearing six per cent. interest for every \$50,000, collected and expended of its own money, in the actual construction of the road. The amount of these bonds is not to exceed \$2,000,000 and as security to the State for the payment of the annual interest and the ultimate redemption of the principal of these bonds, the Company are to mortgage their road and its appurtenances to the State from time to time as the bonds are issued and accepted by the Company.

Suspension Bridges.

A wire suspension bridge is now in course of erection over the Kentucky river as part of the Louisville and Frankfort Railroad. The length of the cables is 585 feet each, the height of the towers 75 feet.

Mr. Serrell, engineer of the Lewiston suspension bridge has made an examination of the site for a suspension bridge at Black Rock, near Buffalo, over the Niagara river.

The space between the two towers would be 1,800 feet. This would be the longest suspension bridge in the world. It is stated that the cost would only be \$250,000 .-This would be a trying affair.

Novel Application of Mechanics.

Mr. Alfred Smee has announced that he has contrived a piece of mechanism of much novelty; and he states, that by it he can show the relation of any number of facts on principles inductively and deductively, and thus performs mechanically what has hitherto been thought to be the province of the mind alone. For the action of the machine he so arranges the words, that every word forms a half of the meaning of the word above it, and comprises the meaning of two words below it. By these means, he obtains an arrangement of words having the properties of a geometrical series. When the words are expressed in their proper relations upon the machine, which is constructed upon the same geometrical plan with the logical readings of all, some, none, the bearing of any number of actions on the machine is indicated, and the conclusion can be read off by inspection.

Singular Old Coin.

The editor of the Milford (Del.) Beacon, was shown, a few days ago, a coin—a composition of copper and brass-found on the farm of Mr. Ira Hammond, about two miles from that place. It is over 600 years old, bearing, date 1178; on one side is a crown, and upon the other the words "Josephus, I D J-PO RT-ET-AL G-REX," very legible, and the work well executed. This coin is about two hundred years older than the discovery of America, and the question very naturally arises, where did it come from?

Daguerreotyping the Moon.

Some very ingenious daguerreotypes of the An agency has just been established in moon, as it appears through the Cambridge Charleston, S. C., for the sale of tea plants telescope, have been made by Mr. Whipple, of Boston. In those views the volcanic mounvalleys between, and the distant plains.