

## Miscellaneous.

Special Correspondence of the Scientific American  
LONDON, July 30th 1851.

Hobbs, our American locksmith, has dumfounded all the great London locksmiths, by picking his way into the best patented locks made by the English manufacturers. This feat was done by Mr. Hobbs, who operated upon a lock placed upon the vault door of the State Paper's Office, and considered proof against picklocks. In twenty-five minutes he was in among the State records, and in ten minutes after he re-locked the door, a feat, the lock being a detector, that was thought impossible. He is to experiment on another patent lock, which is to be enclosed between two boards, sealed by the committee, and nothing but the hole for the key is to be exposed to view, and thirty days is to be the period allowed for opening it. The experiment is looked forward to with considerable interest by all persons connected with the trade. Mr. H. is to get £200 for opening it, and he says he will do it. Mr. Hobbs exhibits a lock, and offers a reward of £200 to any person who can pick it or form a false key which will open it, after examining the lock and key for any period they may please. The Lock is Day & Newell's American Parapentic.

From the opening of the Exhibition till Saturday, July 26, no less than 2,929,778 visits have been paid to it. £66,638 5s. has been received from the sale of season tickets, and the amount taken in payments at the doors has been £181,011 6s. With subscriptions, therefore, the total incomes of the Royal Commission now considerably exceed £300,000 (more than one million and a half of dollars). Mr. Abbott Lawrence, having requested that his son, Col. T. B. Lawrence may be allowed to take out of the Great Exhibition three of Mr. Colt's revolving pistols, to be forwarded to the Cape of Good Hope, for the use of an officer in Her Majesty's service, the Lords of the Treasury have given directions to the proper authorities to permit the pistols to be removed from the Exhibition Building, and delivered to Col. Lawrence, as requested.

In raw materials America stands unapproachable, at least in that material upon which so much of England's manufacturing superiority depends, viz., cotton. The southern planters have not shown the least disposition to produce any effect apart from inherent excellence, because here are not merely neat packages of samples, but full-sized bales. The chief cottons shown are from Georgia, Alabama, Tennessee, and South Carolina. Among the first may be specified that shown by Mr. Jones, of Burke County, which is beautifully fine, soft, and silky. The cotton from Mr. J. B. Merriweather, of Montgomery, Alabama, is soft, strong, fine, of good color, well handled, and in all respects most excellent. The same also may be said of the cotton from Mr. W. Hampton, of Charleston, S. C., which closely resembles the preceding in all its good qualities. These two bales are probably the finest of the whole series, but undoubtedly some of the others are very nearly, if not quite as good. The cotton from Mr. W. Seabrook, of South Carolina, especially may be mentioned as first-rate. Amongst the contributions from Tennessee, the specimens shown by Mr. D. Lak, of Memphis, Shelby Co.; Mr. G. L. Holmes, of the same place; Mr. J. Pope, and Mr. Samuel Bond, also of Memphis, are as good as can be desired. In looking over the cotton samples, in the East India department I must say our planters need have no fears about such competition, all they have to do, is to progress as they have hitherto done. The indigenous cottons of India are all of them, by nature, short staple; they are wanting in that long, silky lustre which is so eminently characteristic of the best varieties of the American species. But on looking over the extensive series of the native cottons of Hindostan, there is another fact which cannot fail to strike the observer—and that is, the careless and imperfect mode in which the fibre itself has been prepared and collected. One series of cotton from the East

India Government Farms, and made into Manchester goods, look very well, but they are of short staple. There are some good samples from the British West Indies, and to that quarter let the American planter have his eyes wide open. There are beautiful specimens of Sea Island from Trinidad and Barbadoes, and a splendid sample of the New Orleans kind from Jamaica. Small samples of nankeen, and some very short staple cotton are shown in the Chinese department; and a single specimen of good and long cotton is shown from Peru. The African cottons do not show to much advantage.

A beautiful little specimen of a marine steamer has come up to London from the Clyde, in Scotland; she is named the "Tourist," and was built by Denny & Brothers, Dumbarton; her length of keel and fore-rake are 155 feet, breadth of beam 16½ feet, depth of hold 7 feet 9 inches. Her two engines are oscillating, 70 horse-power each, and go like chronometers, driving her at 16 knots per hour. Her paddle wheels are feathering—quite a common kind here, and I would advise our North River Engineers to try them, they add greatly to the speed of a vessel.

In the Exhibition I have noticed a gem for printers: it is a specimen of type, said to be the smallest ever manufactured in this country. The whole of Gray's Elegy, consisting of thirty-two verses, is contained in two columns, 3¼ inches deep.

There is also another for watchmakers, it is a watch made of ivory, with gold screws and steel moving powers. It works in ten rubies, and weighs (glass and vase included) only half an ounce.

There is another for musicians, and it belongs to America. It is an invention by T. S. Wood, of Virginia, that is never without a crowd about it, when the doors are opened. It is the attachment of a violin to a piano. It is a bona fide fiddle, played with four bows—producing the softest vibrations of sound; Paganini could not have excited more wonder in the meridian of his celebrity. If the performer is master of the piano, the horse hairs run to and fro on inclined planes with an activity that puts all common elbows at defiance. It is an original idea, clearly an American one, to fiddle by machinery. Sir George Smart, the distinguished composer and organist, the oban man of the music jury, contemplated its movement a long time with evident amusement.

In my last I presented some information relative to the proceedings of the British Association for the advancement of Science, and in my next I will present some more, as it is very interesting to scientific men.

A trial has taken place to test the quality of the French and the English Sheffield files, the English proved to be superior.

By a vote in Parliament, of 75 to 47, the Exhibition Building will be left standing to the 1st of May, 1852, in order to collect opinion relative to its permanence in Hyde Park. I think it should be removed, for however fine it is—and it is the greatest wonder to be seen, the green trees and the blue sky above are more valuable to the Londoners than the Crystal Palace. EXCELSIOR.

[We had some conversation, a few days ago, with a gentleman of this place, direct from London. The greatest wonder to be seen, he said, is the Crystal Palace itself. The American department, he stated, was wretchedly managed, or we would have made a much better appearance. Too much room was demanded in the first place, for if the articles in the department were as closely packed as in other departments, they would have appeared to better advantage. It was the general opinion there, he said, that the Commissioner was not very well qualified for his office; the whole business, as is generally the case with our political managers, has been a political blunder. A mere politician does very well to blow, but he is evidently out of his element among machinery.—[ED.]

Endeavors are about to be made by some gentlemen in Liverpool to naturalize American quails and prairie-fowls in England. The quails are to be turned into close pre-

serves, where they will be kept together and fed till the breeding season, when they will be allowed to lead their young at full liberty, and find their food as they please. The prairie-hens are to be tried in the woods, pheasant-preserves, moors and meadows.

## The Cotton Crop.

The calculations regarding the cotton crops this season exhibit a very wide difference. The crops, by some, it is said, will yield three millions of bales. A New Orleans cotton merchant says this calculation is utterly fallacious, the drought has affected both upland and lowland cotton. It will be impossible to make more than four-fifths of the usual or upland crop, and as three-fourths of the entire crop of the United States are derived from upland sources, the ultimate extent of the production can easily be prognosticated. He says:—The best that can be expected of the upland regions of Tennessee, North Alabama, Western Louisiana, Mississippi and Georgia, is a crop twenty per cent. less than last year, while over the lowland, an alluvial cotton region, hangs the contingency of a fine or foul autumn, and a long or a short season.

## Lard Oil.

America is the land of bacon and lard. It raises more of those gentry named "Alexander Campbell," than all the world beside. The lard of the United States, is a great source of revenue and Ohio is the headquarters of this magnificent fat business. In Cincinnati there are forty manufacturers, large and small, of Lard Oil. These consume on an average, each week, the year round, 1000 packages of 300 lbs. each; equal to 52,000 packages or 15,000,000 lbs. per annum. From this is to be deducted, for sterine, one-third or 5,120,000 lbs., leaving 10,480,000 lbs., equal, allowing 8 lbs. to the gallon, to 1,110,000 gallons. This may be considered a fair average of the amount manufactured and consumed yearly in Cincinnati. To the latter account must be set its five large candle factories, which consume the sterine in combination with tallow. As manufacturers are unwilling to divulge the quantity of candles made, we are left to infer it from the large amount of sterine which enters into their composition,—two pounds being consumed for each pound of candles. Lard oil is fast superseding other oils, and were it cheaper than it is at the East, the common whale oil would soon be driven entirely from the market.

## Opposition to Robison's Balloon.

M. Poiteven, the celebrated French aeronaut, is constructing a most wonderful propeller balloon, at Paris. It consists of three balloons, each 120 feet high, attached to the two ends and centre of a carcass of wood, about the length of a Brooklyn ferry-boat. The steering and advancing apparatus consist of two screws, moved each by a steam engine of four horse power, and acting upon the air precisely as the screw of a propeller does upon the water, and of sixteen inclined planes.

The three balloons are ready—and their immense folds fill the whole length of the Palais National, where fifty seamstresses have been hemming and binding and stitching away at them for the last two months and a half.

He was to ascend on the 1st inst. By the next steamer we shall hear how he succeeded. A great number are very anxious to know when the American balloon propeller will make her trial trip from Hoboken.

## Railroad in Spain.

In the Spanish Cortes on the 28th of June, the Minister of public works presented a bill for a grant for the establishment of the Aranjuez and Almanza Railway. The grant is of 220,000,000 reals, three per cents, equal to 220,000,000 cash, for the construction and equipment of the centre road, the distance being 144 English miles. The contractors pledge themselves that it shall be finished in three years, and that they will have eight principal stations, 20 carriages (1st class) 27 carriages (2nd class.) 40 carriages (3d class,) 78 wagon platforms for goods, and 20 locomotives. There is to be a single track only.

## Bridging the Nile.

The editor of the Boston Medical and Surgical Journal, now on a visit to Egypt and Nubia, gives the following account of the bridge in progress of construction across the Nile near Cario:

"A French engineer is constructing a beautiful bridge across the river, where the water is both deep and swift. The arches are of large brick. Another appears to be building over the Damietta branch, as seen in the distance. Mud machines, all iron, worked by steam; pile-drivers, and machinery of all kinds suitable for carrying on a heavy business; besides immense piles of stone, brick, timber, and other materials, independently of laborers, soldiers, carts, horses, boats and mules, give the spot for six miles round, an active and bustling appearance. Six years, we are informed, have elapsed since the piers were commenced. This is the first bridge, it is believed, ever built across the Nile. It was commenced by Mahommed Ali some years since, and a fear is entertained that it will never be finished. The diving bell is an extraordinary machine, with which sixty men are at once sunk to the river-bed to drive piles, lay the stones, &c. The water at the lowest point is thirty feet deep, and the mud thirty more below that, down through which the foundation of the pillar is sunk, in iron boxes, till its weight lodges on the firm bottom. The whole length of piers for receiving the arches, is ninety feet. Last season 25,000 men were employed, at present only 2,000, the Pacha having used up his funds in building and furnishing costly palaces in all directions. Every three months the Governor of a district is called upon for a certain number of villagers for this public work."

## A Metallic Rudder.

The rudder of the San Jacinto now in the Brooklyn dry dock, is about 24 feet in length, composed of a centre wrought iron spindle weighing 2,249 lbs., turned and finished; upon this spindle is cast, for nearly the entire length, a composition casting of copper and tin, of 1,940 lbs.; to this casting, flanges project nearly the entire length of the spindle, to which are riveted the copper plates which form the rudder. The object of the casing is to prevent rust on the iron. The whole weighs about 6,350 lbs., and was manufactured at the Washington Navy Yard.

## A Monster Engine.

Messrs. Rodgers, Ketchum & Grosvenor, of Paterson, have built a locomotive for the New York & Erie Railroad, which went upon the line on Monday week, calculated to draw forty loaded cars, or a weight equal to 800 tons—a large freight for a ship.

## Coal in Dutchess Co., N. Y.

The Poughkeepsie Telegraph notices the discovery of a coal mine on the farm of F. B. Schultz, in Clinton, Dutchess Co. The coal lies near the surface of the earth, and is similar to that taken from the Lackawana mines.—[Exchange.]

[This coal will no doubt turn out to be mica—it looks like coal, smells like coal, but burns like brick.]

## Imposing Stones.

Mr. J. W. Sanders, one of our most experienced pressmen, has invented a new iron imposingstone, which is pronounced a capital invention. This is the age of iron. One of the advantages of this stone is the easy manner in which the form is taken off and replaced, by having gear wheels attached to it, so that the form can be raised or lowered by means of a crank, which brings it down to the floor without the labor of lifting, or the great danger of falling out. For large forms, especially, this stone must become indispensable. It is also a very neat ornament to the composing room, and will last forever.—[Baltimore Sun.] [We agree with our cotemporary; this is a good improvement for large forms, that is, the way of moving them on and off the stone, we like it decidedly; iron imposing stones, however, are not new by any means.]

Communications which come to this office, without proper signatures are disregarded. There will be no variation from this rule.