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THE  
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## Rail Road News.

### Alabama Railroad.

Mr. Editor—Our Railroad from here to the Tennessee River is commenced under the most flattering auspices. Mr. Lapsley, the president, is a practical business man, and nothing heretofore undertaken by him has failed of success. The South Western, Va., Railroad, from Lynchburg to Knoxville, Tenn., is in progress. It will some day communicate with ours, and will then be the great route from North to South. J. H.

Selma, Ala.

### Railway Injunction.

Judge Caldwell, of the Ohio Supreme Court, granted injunctions against the Cincinnati, Hamilton, and Dayton Railroad, on the applications of the Spring Grove Cemetery, and of Platt Evans, to be operative when they shall give bond and security in each case, in the penal sum of \$5,000, conditioned to pay the damages to result from interrupting the work on the road, if the Company's right shall be finally established.

### Charleston and Memphis Railroad.

Great exertions are making to build this extensive work, more than one-half of the distance is already finished. The cars are running from Charleston to Rome, in the North Western county of Georgia. There are pieces of the road through Alabama, along the Tennessee river, also in actual operation—so that to unite Memphis and Charleston is not such a gigantic undertaking as it appears at first sight.

Passengers may now go from Pittsburgh to Philadelphia in fifty hours, without staging at all—taking the railroad at Jacktown. So says the Pittsburgh Mercury.

An Iron Railroad Bridge has just been thrown across the Savannah River, near Charlottesville, Virginia. It is to be tested by running a train over it of 120 tons.

The Railroad fare between Albany and Buffalo is to be reduced to \$8.

### A Horse's Opinion of a Plank Road.

The North Carolinian tells the following anecdote of an old farmer of that region, who had tried the plank road:

He was at first much opposed to the plank road, and thought it would be a waste of money to build it. But he came to Fayetteville with his wagon and produce, and drove on it some miles. When he got back to Chatham, our merchant friend asked him if he had seen the plank road. "Yes," he said, "he had seen it." "Well, did you drive on it?" "Yes." "Well, don't you think you can carry four times as much weight on it, with your four-horse team, as on a common road?" "Oh, yes," says he, "it is first rate; and is a fact that when the wagon got to the end of the planks and struck the heavy dirt road, every horse stopped and looked round."

The best American Apples sell in England at 6 cents a piece.

## IMPROVEMENT IN THE MANUFACTURE OF IRON.

Figure 1.

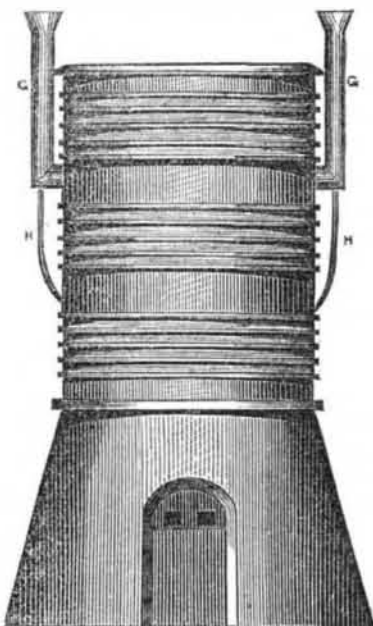
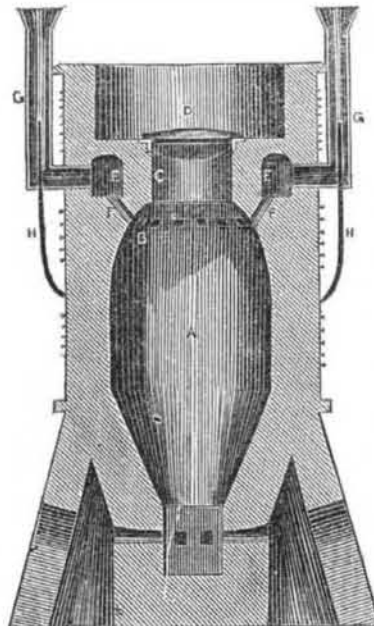


Figure 2.



This is an invention recently patented in England, by Benjamin Thompson, Civil Engineer, at New-Castle-upon-Tyne, and first noticed in our superlative exchange, the London Patent Journal and Inventors' Magazine. The nature of the invention consists of two parts. First, the construction and working of the furnace. Second, the application of the gases generated in the furnace to subsequent useful purposes. Figure 1 is an elevation of the furnace. Figure 2 is a vertical section.

The same letters refer to like parts.

The body, A, of the furnace, is constructed somewhat in the ordinary manner; the top of it, at B, is of a dome shape, and surmounted by a throat, C, the upper end of which can be closed by the iron plate, D, which is intended to fit as air-tight as practicable, and when removed, it is through this aperture that the furnace is charged. Above the dome, B, and around the throat, C, is the circular tunnel or chamber, E, E; it communicates by the apertures or short flues, F F, with the body of the furnace in the upper part of the dome; from this tunnel, upon opposite sides of the furnace, proceed the vertical pipes, G G, these are intended to carry off the gasses; H H, are two steam pipes; their lower ends communicate with a steam boiler behind the furnace, from which the steam is supplied; the steam pipes, H H, pass upwards into the centre of the vertical pipes, G G, and their ends terminate in

a number of steam jets, arranged so as to produce the best effects of exhaustion; the tuyers are arranged in the usual manner and intended to supply air to the furnace by draught, either in a cold or hot state. The exhaust pipes, G G, are about eighteen inches in diameter, and the diameter of the steam pipes is about four inches. The steam jets being in action, they cause an exhausting action in the pipes, G G, thereby drawing the gases generated in the furnace through the short flues, F F, and tunnel, E, and effecting the necessary working of the furnace. The lid, D, is lifted from its seat occasionally, for the purpose of charging the furnace, but this is to be done as seldom as possible, as at these times the exhausting action of the steam jets is to be stopped, and the consequent working of the furnace suspended. This method, therefore, is to do away with the blower, and use exhaust by steam as a substitute.

The second improvement is, the employing the gases generated in the furnace, in the above described operation, to subsequent useful purposes, as heating the refinery and other furnaces, or generating steam in steam boilers; to effect this, the vertical pipes, G G, are dispensed with, and the gases generated are carried by a pipe from the tunnel, E, to the furnace where they are to be employed. The steam jets or other exhausting means are then employed in the exit or chimney from this furnace, instead of the smelting furnace, as above.

### Autographs.

The following article from Munsell's Typographical Miscellany is worthy of a place at the side of ten thousand of ink-bottles:

A fruitful source of perplexity to the printer, and indeed to every body else, is obscure manner in which many persons write their names. A proper name is the most difficult thing in the world to decypher if badly written. A common word in a paragraph may be known generally from its necessary connection with the rest of the sentence in which it stands.—But there is no such help in this case. It often happens that business men receive orders which they cannot respond to for this reason, and instances are numerous of goods being lost where they were consigned to names so obscurely written to an order as to be mistaken. A most remarkable instance of fair autographs, considering the number, are those attached to the Declaration of Independence of the United States. It is seldom so many occur in a single

document, in which so few unreadable ones appear. Scarcely any thing can be more important than an unmistakable signature. Was there ever a specimen to surpass that of John Hancock on the document above referred to! It stands there to challenge the admiration of the world in all coming time. In the autographs of public men, not excepting those of bank officers appended to bills, we frequently meet with such as are utterly unreadable.—They should seem to have been written for puzzles, and they serve that purpose most effectually. It has been our lot to meet with more than one which did not contain a single character resembling a letter of the English alphabet. If they were written in crotchets with a view to defy the skill of the counterfeiter, the idea was a mistaken one, for they subserve no such end, a plain, bold, manly handwriting much more embarrasses attempts at fraud.

## Useful Receipts.

### To Decompose old Tan.

Make an admixture of three bushels of shell lime, hot from the kiln, with one bushel of salt, previously dissolved in water, the caustic lime will decompose the salt, combining with the chlorine, and forming chloride of lime; thus setting free the soda, which combines with carbonic acid from the atmosphere, and forms carbonate of soda. Both chloride of lime and carbonate of soda are capable of decomposing woody fibre or other organic matter better than lime, they do not drive out the ammonia, and are therefore preferable to lime. The mixture should be turned every other day for ten days and then mixed with the tan, at the rate of four bushels per cord, and in four months it will be fully decomposed.

### Estimated Value of Urine as a Manure.

Professor Rodgers, in his excellent work on "Scientific Agriculture," has the following estimate of the value of urine as a manure, which we believe to be a very near approximation to the truth:

If we allow the quantity of urine voided by each individual to be 600 pounds yearly, the city of Rochester, which contains 20,000 inhabitants, would furnish yearly about 240 tons.— This estimate, at the price of guano, would be worth \$21,600. Now, if we estimate the number of horses and cows of the city to be 500 each, and that each animal voids as much urine as two persons, the amount would be 80,000 pounds, or 40 tons, which would be worth \$1600. Here then is a loss, if we reckon guano at \$40 per ton, of \$23,200, or of manure enough to produce, in addition to the ordinary crop, over 16,000 bushels of wheat in a single year.—[Gen. Far.]

[Practically, the value of urine has been known for a century, and employed mixed with water for cabbages, both by the Dutch and Scotch raisers of cabbages. It is not long since the value of cabbage, as a strongly nitrogenized vegetable was discovered, but this might have been inferred from its healthy growth when fed with nitrogenized agents, such as urine, or ammonia in any form.]

### Heathen Temple in Serlingham.

Of this edifice Dr. Alexander Duff, a Scotch Missionary of great accuracy, says, "It is a mile square, and in the centre of each side is a tower of gigantic height; the lowest pillars of which are single pieces of stone, forty feet long and five feet square; reminding the spectator of the stones of Solomon's temple. Within the outer square are six others, three hundred feet distant from each other, and between them are numerous halls. The roof is supported by one thousand pillars, each of one solid block of stone, very finely carved with figures of the gods, and other devices. Siva, the god of the place, is formed entirely of gold in solid pieces, the entire height of the statue being fifteen feet. The platform also on which the god rests is of gold. All his ornaments are in proportion to his size. The quantity of emeralds, pearls, and other precious stones which adorn him is immense. No jeweller's shop in London could exhibit anything like it. The whole gives an idea of the immense power of Brahminism in former days, grinding down the people, and turning all their wealth towards themselves.

Mr. R. A. E. Meyer, aged 27, a native of Hanover, stabbed himself in this city. He was an architect by profession and of uncommon ability, he having been the superintendent of all the telegraphic lines in Prussia.