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Rail Road News.

Whitney's Railroad to the Pacific.

It is now generally known that Asa Whitney, of New York, has petitioned Congress for a grant of lands commencing at Lake Michigan, of 60 miles wide, and extending to the Pacific, or 92,160,000, (the State of New York contains only 28,440,000 acres, including lakes and rivers) to be applied to the building of a railroad to the Pacific. We published his scheme in Volume 2, and cannot go over the features again, and we only refer to it now as being a scheme which has met the approbation of a Committee appointed by Congress, who have made a favorable report on the subject, strongly recommending Congress to pass a Bill embracing the conditions set forth in Mr. Whitney's petition, viz., that he should construct the road by the sale of the said lands. The proposals are fair, and the results to be anticipated from the construction of this road, incalculable. Mr. Whitney says it will make our country the half-way house between the East Indies and China, and Europe. Mr. Whitney has devoted a great number of years to this, his gigantic scheme, and with untiring energy he is still as determined as ever to carry out his project. He must have expended a fortune upon it already.

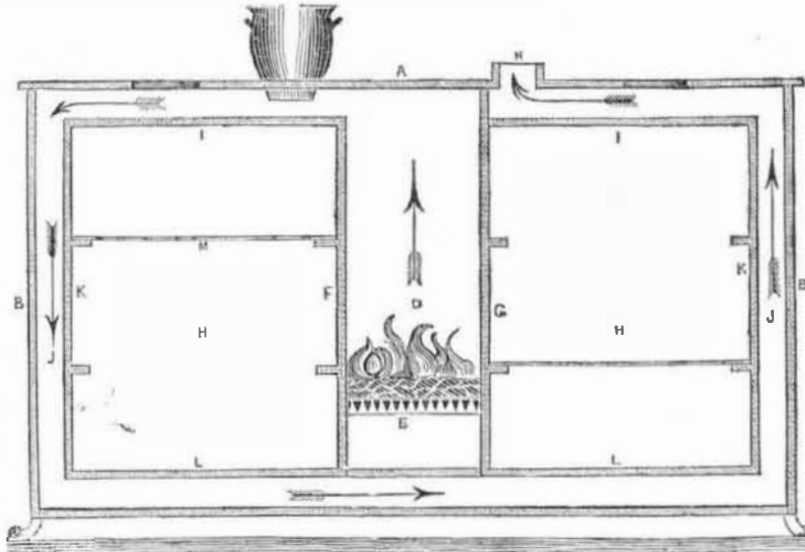
The Committee, we see, endeavor to create a little excitement in favor of immediate action by our Government, by suggesting the probability of England constructing such a road through Canada. Whenever any new scheme is brought forth there is certainly a great amount of weakness displayed in holding up John Bull to whip us into the traces, either out of spite, fear, or what not. Uncle John has got his hands full of railroads at home. He never will build a railroad through Canada—it would be absurdity to do so. He is more sagacious than that: his eye and hand are now on a shorter route to his East India possessions, viz., through Egypt: he has already commenced operations there. This scheme, we believe, is practicable, and Mr. Whitney deserves a great amount of praise, and more than this—he deserves fame and success.

First Railroad Charter in America.

The first Charter for a Railroad in this country was granted by New Jersey. The Legislature, at the session of 1814-15, chartered the New Jersey Railroad Company, to build a road four rods wide from the river Delaware, near Trenton, to the river Raritan, near New Brunswick. The country was not then prepared for the enterprise, and the work was abandoned. The honor of introducing railroads was reserved for Massachusetts, and the first road that was built on this continent, was the Quincy Railroad, from the quarry to Neponset river, which was first used in the year 1827.

A locomotive exploded on the Western Rail Road, at Clappville, Mass., on last Saturday.

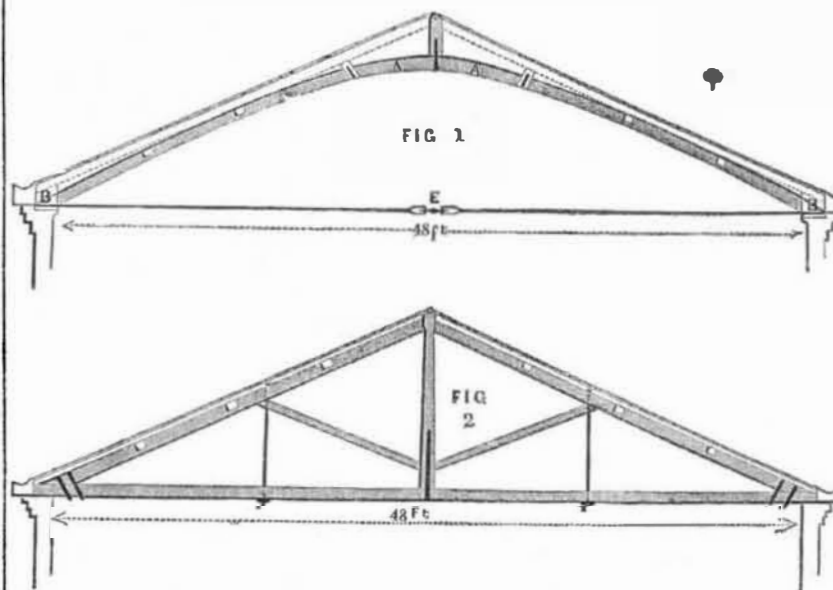
JACKSON'S PATENT COOKING STOVE.



This cooking stove is the invention of Mr. Henry Jackson, of Evansville, Vanderburg Co., Indiana, and patented on the 23d day of April last. It is a double cooking stove, and is so arranged in its various parts that a far higher degree of heat can be maintained in one compartment than another; for cooking delicate dishes in one part, and roasting in another, as may be desired. This figure is a vertical section, exhibiting the stove in operation. A is the top plate; B B are the side plates; D is the fire chamber; E is the grate; F G are the division plates running back and dividing the stove into two compartments, H H. The plate G is continued up to and unites with the top plate. The plate F terminates short of the top plate, A, and unites with an inside plate, I, at the top, forming the first out flue, as shown by the arrow, the said flues, J J, being formed around by the outside plates and the inside plates, K K, L L, and the other top plate, I, and the smoke passes out at the pipe, N. The fire being made in the chamber, E, the flame and heated smoke and air pass off through the flue, K, first around the left side compartment, I, surrounding it with a highly charged current of caloric, which raises the heat in this compartment to a degree much greater than in the other, around which the current of caloric passes when comparatively exhausted—an effect which is obvious. The top of the stove over the left side compartment, under which the flame and heated air directly pass, will be exposed also to a powerful heat, and it is accordingly provided with openings or places to set pots or kettles for boiling, &c., while the top on the other side will be subjected to only a moderate heat, which for many culinary purposes, will be found very convenient. Thus it will be seen that boiling, roasting, or other kind of cooking, which need a powerful heat, may be conducted on one side, and in one part, while delicate dishes, &c., requiring a moderate heat, are prepared in the other.

Communications addressed, post-paid, to Mr. Jackson, will receive prompt attention. The claim is for "a Double Cooking Stove, with two compartments, the smoke flue passing first around one and then around the other."

BEVAN'S PATENT ARCH GIRDER.



In our last number we described Bevan's Patent Arch Girder, as designed for bridges, and stated our conviction that its strength, &c. would recommend it to general use; we have since examined into the cost of construction, and believe that a bridge 100 feet in length, between supports, with a roadway of 12 feet, can be erected in a substantial manner for \$500. We would ask our readers whether there is at present known any other plan of bridge to compete with this in economy; for strength we say, only examine the principles of construction, and conviction must follow. We are most warm in our praise of this invention from a thorough conviction that it is one of great practical utility—one that must return both honor and profit to the inventor. We shall watch its progress and from time to time

publish engravings of any works which may possess general interest. We would further advise its application to swing, draws and landing stages; we throw this out as a hint to Mr. Bevan.

In our present number we publish engravings of two roofs. Fig. 1 is a roof constructed on the Arch Girder. Fig. 2 is the roof of the Car House at the Depot of the Hudson River Railroad, Tenth Avenue, N. Y. This roof is selected merely for the purpose of contrasting the weight of a roof, admittedly well framed and of ample strength, with the weight of a roof of like span constructed on the principles of the patent.

In fig. 1, A is a girder formed of two beams bolted together with blocks between, as in the Girder for bridges—the beams being formed of layers of plates, the inner layer breaking joints with the outer layer; a flexible strapping of iron wire rope or strap iron, is passed over the upper face of the arch and brought round the ends to the clamps, and right and left screw, E. The strapping is drawn to any required tightness by the screw, and the arch girder is lifted into its berth, its ends resting in bolsters, B B, fixed on the side walls. The ridge board is supported by a short king post; the rafter beams truss the arch girder and keep it from buckling. The ends of the girder may have friction pulleys fastened to them as in the bridge girder. The strength of this roof is evidently within itself, and as we remarked in our last number, the girder cannot fail unless the strapping is first broken; now this is almost impossible, it having been ascertained that a wire rope 1 inch in diameter is able to support 30 tons. The extreme lightness, independent of its cheapness, will recommend it generally to railroad companies, &c. We shall, in conclusion, give the relative weight and cost of materials in figures 1 and 2:—Fig. 1, timber in girder, A, 270 feet, of 1 inch thickness, weighing 778 lbs.; cost \$5.50. Flexible strapping, weight 112 lbs., cost \$9.98; iron bolts, 50 lbs., cost \$3. Total weight, 940 lbs.; total cost of materials, \$18.38. Fig. 2.—Timber, 804 feet of 1 inch, weighing 2,245 lbs.; cost, \$16.08; iron in bolts, cramps, &c., 203 lbs.; cost, \$12.18. Total weight, 2,448 lbs. Total cost, \$28.26.

For further particulars, or to inspect models, apply to Freeman Campbell, Esq., 608 Washington, street, and 7 Broad street, N. Y. The well known reputation of this gentleman, and his high standing in our city, need no comment from us.

New Coloring Matter.

M. Garot obtains, by acting upon the root of the rhubarb by nitric acid, a substance which he calls "erythroze." It combines with the alkalies, forming coloring compounds susceptible of application in the arts. The compounds with potash and with ammonia possess, according to M. Garot, a coloring power many times greater than that of cochineal.

[The above we extract from an exchange, and have some doubts about its correctness as a whole. That its nature is different from cochineal, there can be no doubt, as the latter is an animal substance, and does not give out its coloring matter with alkalies. It may, however, be a good substitute for madder, as it gives out its coloring matter in the same way.

The steamship Viceroy, bound from this port to Halifax, and thence to Ireland, has been wrecked between Cape Sable and the Seal Island. There is some fatality about all Irish enterprises.

It is reported that Table Rock, at Niagara Falls, has fallen. We do not believe the report.