1888 opens it will very likely be found that the fears of a great falling off in consumption have been much exaggerated and that, at prices which will keep out the foreign article, American mills will still be kept busy. The reduction of from $4 to $6 a ton compared with the prices which have been obtained this year will of itself encourage railway building, as it will mean a reduction of something like $400 or $500 per mile in the cost of construction.

In this connection it should be said that unfounded reports have been published to the effect that all the great western railway companies had decided to stop further construction for the coming year. While new enterprises are not now projected by these companies on as great a scale as that of 1887, they all have lines under construction on which work will be continued next year, and the irresistible forces of competition will also very probably incite them to other undertakings which now are not anticipated.

Another Inventor Who Will Revolutionize Railways.

J. W. STOKER, of Kansas City, has just thrown upon the world an invention that is calculated to entirely revolutionize railroading, by doing away with steam and putting electricity in its place. It is said that a train carrying all of Mr. Stoker's patents would be a moving stream of electricity, a circuit on wheels, and the inventor is confident that it will be but a few years until all the railroads in the country will have adopted his patents. He has had no trouble in organizing a company of Kansas City capitalists, who are of his opinion and who have organized and taken $1,000,000 of stock in the patents. The railway train of the future will be propelled by electricity, of course, and the inventor, to hasten the change from the old to the new method, has arranged his electrical contrivance so that it can be applied to the locomotive of to-day. The tender will be replaced by an electrical storage battery car, about one half as large as an express car. The electricity generated by the battery will supply an electric motor in the engine. The motor operates compressed air pumps which force the air into the boiler and run the engine with cold air instead of steam. This does away with fuel and water, smoke and cinders. Having furnished the power the inventor has turned his attention to the train itself. A very neat little contrivance, called by the inventor an electric conductor and air-brake coupler combined, provides connection for the electric wires which are run through the train, by connecting the tube which contains them with air-brake tube. The coupler makes the connection for both as simply as though they were but one tube.

Mr. Stoker is now at work upon an invention that he expects will entirely supplant the Westinghouse air brake. This is an electro-automatic air brake constructed upon an entirely different plan from that of the Westinghouse. By means of it the pressing of an electric button in the cab of the engine will stop the train at once. The bell cord will be done away with by another invention, and the grasping of a wooden handle or the touch of an electrical button will blow a whistle in every car in the train and also in the engine.

There will be no further trouble with the brakeman who calls out the names of the stations in an unintelligible gibberish. In the end of each car will be a sign. At the side of the track at each station will be a post, at the foot of which will be planted an electric battery. An arm from this post will reach out so as to touch each car as it passes, and when it touches the car an electric circuit will be closed, and the card bearing the name of the previous station will drop, giving place to the one bearing the name of the next station.

Another electrical device that the train of the future will carry, will be a contrivance to prevent the wheels from sliding. This will cause a great saving on a railroad, as sliding wears out the wheels, and is a source of constant expense.

The inventor does not intend that there shall be any collisions of his moving battery trains, and one of his inventions is an automatic flag giving system. By means of this each train will flag itself around curves or at any dangerous point. When a train arrives at a certain distance from the curve an electric current is closed which raises a red flag or lantern on the other side of the curve.

Still another of Mr. Stoker's ideas is an automatic ventilator for railway cars. By a system of electric lights on which he has applied for a patent, the storage battery in the engine will furnish the light for the cars, and the miserable little coal oil lamps will be no more. The engine will also gleam forth into the darkness with an electric headlight, and the inventor has a system of electric lighting for switches. —*Omaha Republican.*

A Threatened Terror.

THE London *Free Press says*.—The Germans have discovered a gray worm as long as the prong of a silver fork, which actually eats steel rails on the railroads. The Cologne *Gazette* tells about an investigation made at Hagen, which discovered the worm at work upon the rails, that were literally honey-combed and rendered worthless by this voracious steel-eating destroyer. It carries a corrosive substance in its head, which is ejected upon the iron, and eats into it, rendering it soft, whereupon the devouring reptile feasts upon the pudding thus prepared. The weevil, the army worm, the caterpillar, the locust, all the plagues combined fade into insignificence before this steel-eating discovery. Iron-clad ships no longer offer any sure protection, the canned corned beef has at last found a foe which can pierce its cover, and the boiler of the locomotive, the tea-kettle of the domestic hearth, the iron water-pipe of the street main, and even the mask of the base ball umpire become, each and every one of them, a snare and a delusion. America has given Germany the Colorado beetle; let us hope that she has not prepared in return this insidious and deadly attack upon its railroad interest! Nothing but electricity can save us. Steel rails powerfully electrified might disagree with the digestion of this new terror, and by inducing a low and morbific condition discourage the work of destruction which would otherwise be unimpeded. Scientists cannot any too soon busy themselves in providing against the attacks of this scourge.

A Word for the Baggage Handlers. The Checking System.

THE Philadelphia *Times* says:—Standing in a railroad centre, where steaming engines rush into the station with trembling haste, one may observe the trunk smasher at his work, and stand in wonderment that he executes his task so skilfully and yet with such little damage. A breathless span of time is allotted him to hand down his pile of trunks, and to the minute the work is done. All around him is the roar of a shifting, steaming world—embarking and disembarking in exciting speed—and the only man that stands cool at his place in the midst of this seething Babylon is the expert baggage master.

To be a trunk handler one must be an expert. None but men of peculiar fitness are stationed at the great railroad exchanges. A greenhorn can at once be detected. He tackles a trunk with bungling awkwardness, he rolls it with puffing labor, falls over it and tilts and drops it a score of times. To watch an expert unloading a train you will observe how his one hand rests upon one corner and the other upon the side. He lands the trunk upon the floor, never upon any corner, always on the full end. The corner is the wrecking point even of an iron clad. He most dexterously hurries it to one side with the ease of a toy, and hurls another after it with the grace and pose of a ball-player. He always prefers a large trunk to a small one—it is better to handle. The wrecking is never done by an expert who handles hundreds of trunks at the great confluences of railroads. It is done by the small fries of the least work—and particularly by the inexperienced hands of road expresses.

Horses and Electricity.

IT is a widely accepted truth that where there is a good deal of smoke there must be some fire. Applying this axiom to what is said in the newspapers about the propulsion of street cars by electricity, it would really seem that the fire is nearly ready to burst out. In the rapidly growing and densely populated cities of New York and Brooklyn the cruelly overtaxed horse equipment of the street car lines is fast becoming an eye-sore. The cable system has been introduced just enough to be appreciable, and show what might be done if somebody would do it. A few weeks ago the Julien electric motor performed some wonderful experimental feats on the Fourth Avenue line, pulling a car full of passengers at the rate of 12 and even 15 miles, the motor being all the time "under the most perfect control, stopping and starting with the greatest pre-