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## GHIP RAILWAY TO ASSI8T THE PANAKA CANAL

The indefatigable de Lesseps has been forced to take backward step in the construction of the transisthmian canal. Finding the work far from complete and his capital approaching exhaustion, he has determined to construct the canal for the present with locks. He has engaged Eiffel, of Paris, the builder of the great 250 meter tower of the coming exposition, to construct for him a series of iron locks. These he proposes to place upon the line of the canal, and for the present to carry vessels across the high ground between Panama and Aspinwall by means of the locks. This is by no means to be interpreted as an abandonment of his original project of a canal without locks. But as a source of revenue, it is absolutely essential that the canal should be in receipt of tolls. Without receiving an incoìne a n early date, the work may have to be abandoned.
This does not mean simply the failure of an engineering project. It means the ruin of thousands of small investors, whose savings of years of toil are represented by the unfinished excavations on the isthmus. To save them from ruin, and to save France from a finaurial crisis which their ruin will inevitably entail, the canal must be finished. The construction of temporary: works is fully justified. It is the only way of securing return from the use of the canal for many years.
De Lesseps proposes to adopt locks and a high level reach. It seems far from certain that he will have sufficient water to supply the locks. If pumping has to be resorted to, at once an immense expense, both of capitalization and running costs, will be incurred. An American engineer, resembling de Lesseps and Eiffel in the greatness of his conceptions, one who has left behind him monuments of engineering equal to the greatest of their works, has provided the remedy for the trouble that now hangs over the Panama canal. His first work affected the internal improvement of his own country. After bridging the Mississippi, he deepened its channel, making the river itself do the work He next turned his attention to a wider field-the re moval or surmounting of the barrier between the Atmoval or surmounting of the barrier between the At-
lantic and Pacific Oceans. His work hitherto had been characterized by its practical features. For crossing the isthmus he designed a no less practical plan-a ship railroad. He proposed to raise the ocean craft upon cradles, and carry theru on a specially constructed railroad across the land surface, from ocean to ocean.
Our allusion is to Captain J. B. Eads. We have so often spoken of this, his greatest conception, that our readers must be familiar with its details. Suffice it to say that it has seemed to us to afford the solution of
quickest achievement of the world's great problem. It may yet effect this result. But here we desire to call attention to it as an adjunct to de Lesseps' work. A railroad already runs across the isthmus. A practica ships over the unercavated line the Eads ship railroad would afford in every sense the best method.
A short raiiroad, a work of cheap construction as compared with canal excavation, would supply the missing link. In a tithe of the time required for the installation of locks and high level canal, and for a tithe of the expense necessary for their construction, the ship railroad could be carried through the forest. All the conditions are favorable for its use. What is needed to avert ruin from the company is an early opening of the canal. When in receipt of a regular income, the work of completing it on the original plan can go quietly on. Far superior in all respects to the lock plan, the ship railroad would answer the requirements. No question of water supply would affect its operations. A railroad already in existence is its pioneer. It is not impossible that with a railroad intended for temporary use in active operation, theorigi nal intent might be abandoned. We believe that the railroad would answer all purposes so perfectly that it would always be retained. Even if the canal were completed, a paralleling of the route would be of importance enough to justify the maintenance of the roadway.

But that is a side issue. Some hundreds of miles nearer Mexico, in Nicaragua, a party of engineers are actively surveying a route for another canal. The Nicaragua Canal Company, in their circular, speak of the collapse of the Panama canal, and promise an early completion of their enterprise. The engineering difficulties of the Nicaragua route seem to be far less. Pride is thus added to the incitements, already great, which urge an early completion of the Panama canal. The Eads method solves the problem perfectly. If every nerve is strained toward uniting the unfinished portions of the canal by a railroad, then and then only can hopes be entertained of seeing the French enterprise in active operation in advance of its American competitor. It is hardly saying too much to affirm that in the conception of the great American engineer is to be found the very salvation of de Lesseps' enterprise.

Dr. J. A. Jeason recommends asepin in 1-grain doses, well triturated with liquorice, as a remedy for offensive ernctations. To be taken after food.

## The Great Illinois Ditch.

There has heretofore been a marsh of some 200,000 acres in extent on the west side of Mason County, Illinois, which lies along the Illinois River, that stream making the western boundary. This marsh, since the settlement of the State, has been great duck and other game hunting grounds, though considerable of a nuisance to the farmers living on its borders. This marsh has recently been drained by the Mason County Ditch Co., consisting of the farmers owning the adoining lands and the outside proprietors of the marsh lands. The main ditch is 60 feet wide at top, 40 feet at bottom, and 8 feet deep. It is 15 miles long, has a fall of 4 feet to the mile, and drains with its laterals, which are 30 feet wide at top, 15 at bottom, and with a depth to correspond with the mains, from 200,000 to 300,000 acres. The cost of the whole is estimated to be $\$ 200$, 000. The earth removed is sand and clay mixed, and offers little resistance to the machinery. The dredge doing the work floats in the water of the ditch and makes 100 feet progress every day. The assessed cost on some of the drained land will ultimately amount to $\$ 25$ per acre, and thence grading down to a trivial $\$ 25 \mathrm{p}$
sum.
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The work has been in progress for several years, and meantime the land drained has produced surprising crops of wheat and corn. The past year-a year of severe drouth-matters have not progressed as favorably in respect to crops, thousands of acres of corn having been lost by "firing," in consequence of the sudden withdrawal of the usual moisture. The thoughtful among the projectors of the scheme and owners of the and are now aware that they have made a mistake in oot providing for holding a portion of the water, and recognize the fact that the ditch is twice the dimensions it should have been. If it were not for the fall -4 feet to the mile-a few locks or dams would hold the water when it will be needed for crops; but now it will take many.

## Benner's Prophecies for 1888.

Samuel Benner, an Ohio farmer, who has gained onsiderable notoriety through the newspapers for his predictions of future events, and who a few years ago published a small volume on the ups and downs of prices, which had a great sale, has now communicated to the Real Estate Journal, of this city, his prophecies for the year 1888, in which he says

This year, 1888 , being the closing year in this cycle of low prices-seven years from 1881-is the golden op portunity to commence the foundation for a business If there is any benetit to be derived from a knowledge of these cycles in trade, it will be in taking advantage of them.

Young men who are about to commence their business career should embrace their present opportu nity. There are but few of these chances in an ordinary life. It requires about ten years to complete an up and down in general trade.

When the depressions which follow commercial crises reach their lowest limit, as determined by these price cycles, they afford the best opportunities for in vestment, and the height of speculative eras are the most dangerous periods to make a commencement in ny enterprise.

This is the opportunity for investors to open a mine, to build a furnace, to erect a mill, to build a ship, to equip a railroad, and to make investments in agricultural, commercial, and industrial operations.
'George Peabody laid the foundation for his fortune by buying American securities in one of our commercial depressions.'

## Wild Ponies on the Southern Coast

On the banks or sand bars that divide the Atlantic Ocean from Pamlico Sound, North Carolina, just inside the lighthouse that marks out to the mariner dreaded Cape Lookout, there is to be found a hardy race of ponies known as "bankers." These ponies have lived there as long as the tradition of the oldest inhabitant dates back. Entirely surrounded by deep water at all easons, having no communication with the mainland, and being barren of vegetation save a scanty growth of sedge grass and low shrubs, the banks have remained uninhabited except by these ponies, which seem to thrive and multiply in spite of the hardships to which they are exposed. How they first came there, or of what origin is conjecture, and tradition merely hints the story of a violent storm, with its attendant shipwreck and loss of all on board, save a lot of ponies from some European port, which were cast upon the sands, and, surviving he storm, became the progenitors of the race now se umerous.
Having to rely on instinct alone, these animals are subject of study to the naturalist, as they are a prey not only to the driving sands, but to the storms of the cape, thatbreak upon andover the narrow sand bar, and change with each recurring hurricane the topography of the country. The ponies, choosing the protected side of the hillocks, burrow deep into the yielding sand, and stamp out a protected stall, where they take refuge from the storm ; and, while many are destroyed, their number has increasod.-American Agriculturist.

