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### RAIL-ROAD

#### Fatal Railroad Accident.

Le Roy Barney, a respectable citizen of Buffalo, was killed on the 1st inst. at the Falls. The evening train had started for Buffalo, and he endeavored to catch it by running; he reached the front of the last car' and attempted to catch hold of the rails on each side of the steps, but caught only that nearest the carriage with his right hand, when he was swung violently round, and the next second was hurled under the wheels, which passed over his head, crushing out his brains in the most frightful manner.

#### Railroad Disaster.

An accident occurred on the Springfield Railroad, last week, by which three passengers were killed and several severely injured. The calamity was caused by the train running off the track at a place called Windsor Locks, between Hartford and Springfield, when two of the cars became detached, and one of them was precipitated iuto the adjoining lock of the canal. No blame can be attached to the engineer, as the accident arose from no negligence on his part, but it is supposed from a defective rail, which threw the train off the

#### Northern Railroad.

The work on the section of the road near Albany is expected to be completed by the 1st of next month. The buildings on the line of this road within the bounds of the city are being torn down, and the ground prepared for the rails. It is confidently expected that the rails will be laid to Cohoes, and the road ready for use by the 1st of December next.

#### A Long Tunnel.

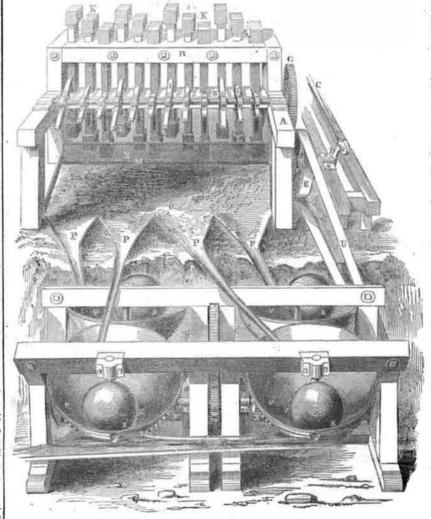
One of the longest tunnels in the world is now approaching completion. It is situated in Hungary and leads from the shore of the river Gran, not far from Zarnowitz to the mines in the Schemnitzer Hill. It is about ten English miles long, and it is intended to answer the double purpose of a channel to drain off the water accumulating in the works, and of a railway to transport the ore from the mines to the river.

#### Air Line Railroad

The air-line project between New York and Boston is again agitated. It is now proposed to make use of the newly constructed Charles called Scott's Hill, in the town of Bellingham, by a direct line of road passing through Woonsocket, R. I., thence across the State of Rhode Island, and thence through Middletown and the State of Connecticut to New York City.

The Pittsburgh and Steubenville Railroad is rapidly advancing to completion. This is the great connecting link between the Pennsylvania Central Railroad, and St. Louis road The completion of these railroads opens a direct communication to the entire west. It is expected that the whole road trom Philadelphia in St. Louis, will be in successful operation by January 1851.

GOLD OUARTZ PULVERIZER AND AMALGAMATOR



The above is a perspective view of H. Ber- the top weights, K K, being hammers also dau's machinery for grinding and reducing and capable of supplying the places of L L. gold quartz to an impalpable powder, and The pulverizing and amalgamating basins are amalgamating the said ground quartz with quicksilver. The same letters refer to like basins, Q Q Q Q, are shown set in one frame, parts. The machinery here represented exhibits a set of stampers placed on an elevation above the pulverizing and amalgamating basins. The stampers are of the usual form, and are operated in the common manner as here exhibited. A strong frame is erected.

A is a cross sill or bearing brace, one on each side, having journal boxes for the lifter shaft, H, which receives motion from the main shaft, D, which is driven by animal, water, or steam power, giving motion to the its basin, into which the pounded quartz is crank through the connecting rod, C. The cog wheel, F, gears into the one, G, on shaft, pulverizing weight and motion of the ball, H, and rotates the lifter shaft. On this shart which rolls on the quartz while the basin is are a series of horns, or lifters, and by some continually presenting a new surface, to change called "wipers" I, for lifting the stampers. the position of the quartz, as it (the basin) There are slots in the vertical shafts or arms rotates on its axis. The quicksilver is placed of the stampers, the lifters take into said slots in the lower part of the basin, and the weight es they revolve, and lift each stamper to a of the ball and its motion, keeps it in continuheight corresponding with the length of the al contact below the surface with the pulvermetal bottom or the quartz trough; No is a bed off and passes out with the surface water. has been treated in the ordinary way. wire screenthrough which the pounded quartz It is therefore superior to a mere surface -reduced to about the size of small shotpasses from the stamper trough to the recenthence into the pulverizing and amalgamating basins. On the other side of the stampers is reduce the quartz to an impalpable powder, an inclined iron plate to guide the ore under in which state it must be for proper washing, the stampers. The upright shafts or arms of or for amalgamation with the mercury. The the guide boards, B B, to drop perpendicularly

set in an inclined position. Four of these receiving the pounded quartz-it is pounded with a small stream of water flowing infrom the spouts, P P. Each basin is a large circular iron' vessel, like a potash kettle, and set inclined at an angle of about 450. The basins are made to revolve, and this gives each ball a rotary motion on its own axis contrary to the motion of the basin. There is one ball, R, for each basin. Each ball keeps rolling in the lower inclined part, Z, of gathered, and there exposed to the rolling amalgamator. Each ball weighs about 3,000 lbs., it can be cast solid, or for convenience, at the mines. The ball motion is the best to each inclined basin through a spout. The bairon, and are so formed as to do double duty leach made with conical funnels reaching drowning.

down to the lower bearing of each. These funnels are not shown, but it will explain their form to say, they are shaped in elevation, like the common kind which gives them a firm bearing below, to support each basin. Said funnels are made hollow so as to admit of being made into furnaces for heating the basins to promote the quick amalgamation of the metals, which is said to be done by a certain degree of heat. Mr. Berdan also proposes to let the exhaust steam when an engine is employed for driving), into the water of the stampers, so as to heat it also. The same water that is employed for stamping the quartz passes into the basins; this is to economize the water in places where it is scarce. The waste water and impurities pass from the basins by the cord uit, T. Motion is given to the basins—they having vertical axes—by having cog teeth, Y Y, cast on the outside at the bottom of each. A cog pinion, X X, on a cross shaft, takes into the teeth on its basin, and gives it a rotating motion on its axis. The shaft of these pinions, X, has a central pinion, W, that receives motion from the large middle wheel, V, on a central shaft, and which thus moves all the basins. Any number of basins may thus be set in rows, and thus moved by a band, U, from the pulley, E, of the main shaft, D. driving a pulley on the central shaft of the large cog wheel, V. The arrangement, motions, and operations of the several parts are now explained.

So far as has been experimented with, it takes about one horse-power to work one ton of ore in twelve hours. It takes about twenty horse-power to work twelve stampers and! four of these tree basins. The price, all complete, is \$200 per horse-power; one, two, three, four, or more, basins can be employed. To prevent the attendants taking out any of the amalgamated gold; the basins can be covered and locked, to be opened by the superintendent only at certain specified times. We have seen some very flattering notices of this machine, in cotemporary journals. A large machine is fitted up at the Novelty Works this city, where a number are being manufactured for California; and one for the New Jersey Zinc Co., to be employed for reducing the zinc ore.

Measures have been taken to secure patents in foreign countries for this machine. More information may be obtained by calling, or by letter addressed to Mr. Berdan, at the Astor House, New York.

#### Composition for Treatment of Wool,

This is a new composition for preparing wool for manufacturing purposes, invented by Wm. S. Hubbell and Amos Barrett, of Kingsville, Ashtabula Co., Ohio, who have taken measures to secure a patent therefor. In the common way of treating wool for manufacturing purposes, it is washed before it is fit for combing, and after having dried is treated with some unctuous agent, such as oil of various sorts, to render it fit for manufacture. By this new process the previous washing is lifter (15 inches) when it—the stamper— ized quartz. This prevents any of the oxide not required, as the composition itself acts up-River Railroad, which will be met at a point drops down, 45 times in a minute, on the called Scott's Hill, in the town of Bellingham, quartz in the trough, with a blow like that of forming a coating to prevent the contact of and renders it afterwards much more suitable a hammer weighing 600 lbs.; M is the cast- quicksilver with the gold—the oxide is rub- for manufacturing purposes than wool that

#### Buckle on your Preserver Right.

An inventor of a patent; life preserver testtacle, O, into the several spouts, PPP, and cast hollow, and then filled with black sand ed its efficacy a few days since, in the presence of a large crowd at Cincinnati. With it girdled to his body, he jumped into the Ohio, not far from Walnut street. Some of the gearing became displaced, and instead of the the stampers are guided through openings in lighter matters pass off at the lower lip of inventor's head remaining at the top of the water, his position was reversed—the head on the quartz; LL are the hammers of the sins are therefore pulverizing, washing, and down and feet up. It was with difficulty the stampers; they are made of the best chilled amalgamating machines. These basins are assembled crowd saved the gentleman from