THE LOCOMOTIVE EXPLOSION AT OYSTER BAY, L. I.

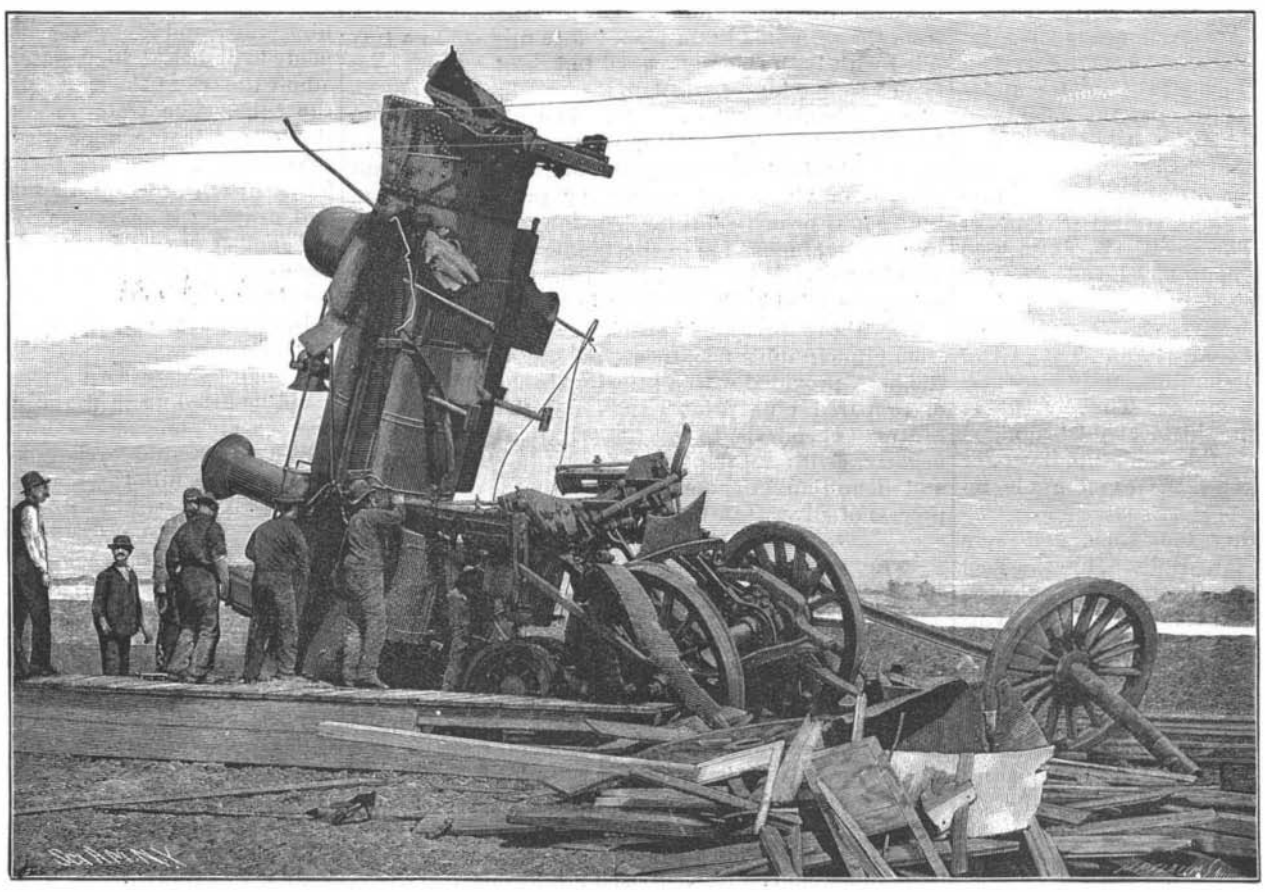
The locomotive explosion noticed briefly in our columns last week forms the subject of the annexed illustration, reproduced from a photograph of the wreck. It will be seen by reference to the engraving that the explosion must have been one of terrific power, as it demolished the rear portion of the engine, drove the drive wheel partially into the ground, tilted the boiler upon one end, and forced the pilot and forward end of the boiler some distance into the earth.

It is supposed that the explosion was due to the weakening of the stays and rivets of the crown sheet, as it was reported that the engineer, who was killed, had intimated to some of his associates that the riveting in the crown sheet and in some of the outer plates of the fire box was defective. If this is true, the present example of the fearful consequences of neglect shows the importance of attending to such defects as soon as they are discovered. Had these imperfections in the boiler been noticed and repaired, the loss of life and the suffering entailed thereby would have been avoided, and a valuable machine would have been saved.

It is reported that the locomotive was built by the Rogers Locomotive Works in 1889. It was one of the 46 tonners intended for the heavy summer traffic, and was run two seasons on the main line. It had been recently thoroughly overhauled, and superintendent of motive power, Charles Thompson, of the Long Island Railway, was unable to offer any explanation of the catastrophe, but the form which the explosion took seemed to indicate that there must have been some foundation for the observations of the engineer, as the crown sheet and fire box were completely detached from the shell of the boiler.

The present accident is a forcible reminder of the responsibilities of the officials whose business it is to know the condition of boilers and engines, and it raises an interesting question, not only in regard to locomotive engines, but as to the condition of thousands of boilers in the basements of our buildings and under the sidewalks over which we pass from day to day.

It is possible that this accident may have been one of the kind whose cause could not have been foreseen, but the reverse is more than probable.



THE LONG ISLAND RAILROAD LOCOMOTIVE EXPLOSION.

Pitch Pine from Seed.

A correspondent writes as follows to the editor of *Garden and Forest:* A large field, worthless for cultivation, almost pure sand, in places a little loamy, is growing up with bayberry, sweet fern and golden rod. Wood seeds of *Pinus rigida* catch here, and if so, how should they be sown, or is there any chance of success in using other tree seeds, and if so, what sorts—either deciduous or evergreen? Expense is very much to be considered. The editor says:

Such land as our correspondent describes will quickly produce a crop of pitch pine (*Pinus rigida*); but it often possesses more plant food than its natural plant covering would indicate, and such land will often grow white pines, oaks and chestnuts of a considerable size and value, as the plantations made in East Greenwich, Rhode Island, by Mr. Henry G. Russell, demonstrate. The best way to plant pitch pine is to sow the seed in the spring with an ordinary seed sower in shallow furrows four or five feet apart each way; but, as the surface of this particular piece of ground is already more or less covered with dwarf shrubs and other plants, it would be cheaper to scatter the seed broadcast over the surface and take the chance of a sufficient number germinating to cover the ground with plants. White pines are best transplanted when ten or twelve inches high. It is a good plan to plant acorns of the white, red and black oaks and chestnuts among young pines, to replace these in case they are destroyed by fire or other causes, or to take their place after the pines are cut. The seeds of such deciduous trees can be quickly and cheaply planted in holes an inch or two deep, made with an ordinary walking stick. The holes, after the seeds have been dropped in, should be covered by a pressure from the foot, which will make the soil compact over them. The seedling oaks and chestnuts will exist for years under the dense shade of the pines, and will grow rapidly as soon as light and air are admitted to them.

Camphor in Phthisis.

Good results are reported from Berlin as attending the use of injections hypodermically of camphorated oil (1 in 10 of olive oil) in the treatment of phthisical patients. Fifteen-minim doses were given, and after a time these were well tolerated, night sweats, irritating cough, and expectoration being diminished in a remarkable manner, even the first dose effecting a very noticeable improvement in the patient's condition. In hæmoptysis the method also proved very useful, patients being enabled to get about again without fear of a recurrence more rapidly than under ordinary methods. The treatment also did good in bronchitis.

The Tupelo and the Sassafras.

Here two most beautiful and much neglected trees, the tupelo and sassafras, are in their own home. A real tupelo cannot be had from a nursery—a nursery bred tree has neither character nor foliage. The only way is to choose in some pasture or upland an orthodox looking tupelo, not over large—one that has decidedly a look and way of its own—and then, with a long bladed narrow post spade, to cut a circle round the tree, severing every root on the way, and to drive the spade through under the tree, dividing the down-going roots as well. Wait a year, and then in the spring move your tree. Let the new hole be dug four feet deep, even though the same soil is replaced; fertilize it liberally, for which purpose wood ashes are excellent; and by and by you will have a tree of some interesting and beautiful shape, covered with more leaves than can be found in the same space on any tree, each leaf as rich in color and lustrous as that of an English holly, and the whole tree in autumn a jewel of deep and brilliant color.

The sassafras, with the liveliness given by the fresh color and variety in the form and motion of the leaves, is a charming tree all summer; and, as every one knows, its leaves turn with great beauty in the autumn. It may adopt, or be made to adopt, other forms than that of a succession of parasol-like layers of leaves on a slender trunk, which is its natural habit. If cut down close, it will sprout into a bush; suckers will appear on every side until a thicket appears, rising everywhere to the middle, a natural bit of artificial work; or, again, a good-sized stem may be cut five or six feet from the ground, and the tree forced to grow so freely that the branches droop and the whole becomes a pile of charming foliage, and a mass of glowing color later.—*Garden and Forest.*

Paste for Labels.

A good paste is made by soaking flake tragacanth in sufficient cold water that the brush will not sink into the paste when finished. To prevent souring, add to the water 2 grains of hydronaphthol (dissolved in a little alcohol) for each pint, and a few drops of clove oil for scent. To keep away the flies add some oil of pennyroyal. Avoid, in making pastes, oil of wintergreen and carbolic acid, for these produce a purplish discoloration by contact with the tinned iron of the brush.

Disaster to Janssen's Party on Mont Blanc.

An expedition had been organized by M. Janssen, the French astronomer, with a view to searching out, near the summit of Mont Blanc, a solid rocky foundation on which to commence his proposed observatory. Five men had been engaged for a week in driving tunnels, but the weather becoming adverse, and provisions being exhausted, and the feet of one laborer being frostbitten, the order was given on the morning of August 21 to descend to Chamounix. All went well till they reached the Petit Plateau, where the weather got worse and a fog was encountered. This drove them out of their usual course, and just at that time an enormous avalanche was precipitated from the rocks, and striking the party swept five of them into a crevasse.

The party consisted of eleven persons in all; first, five who had been working at the tunnel operations, next Count Favernay, of Paris, with a guide before and behind him, and next to these Count Armand, a guide, then Herr Hermann Rothe, of Brunswick, a landed proprietor, who had been to the top, and lastly the eleventh man, Michel Simond, a well-known guide. These were all roped. The avalanche of enormous blocks of frozen snow and ice, of almost inconceivable size, overwhelmed the whole party, swept the six hinder persons into the crevasse, and Herr Rothe and Guide Simond were seen no more. It is the opinion of all the rest that they must have met with an instantaneous death, for tons and tons of ice in blocks fell upon and must have crushed them instantaneously. As soon as those on the margin of the crevasse could disentangle themselves from the ice in which they were buried up to their necks, they went round to the other side of the crevasse in the endeavor to rescue those in it. Blocks of ice, very sharp, had cut the ropes in two places. At a depth of twenty meters, and in various situations, four persons were found saved from further descent by resting on the blocks of ice which had shattered and entombed the two victims of this catastrophe.

An Enormous Microscope.

The Poeller Physical Optical Institute, of Munich, have under construction an enormous microscope for exhibition at Chicago in 1893. It will magnify to 16,000 diameters, or, as ordinarily fitted, to 11,000 diameters. An electric light of 11,000 candle power is to be used for illuminating the image, which is to be projected on a screen. As the heat from this powerful light would derange the focus by expansion of the metal, an ingenious device is used to cool the metal. This is a small copper cylinder filled with liquid carbonic acid under a pressure of 350 pounds to the square inch. It is connected with the microscope in such a manner that an electric regulator automatically opens a valve and allows a drop of the acid to escape in a spray on the metal to be cooled. The liquid immediately evaporates and produces intense cold. The whole cost of the instrument is said to be nearly $10,000.

Frequency of Thunderstorms.

A German periodical gives statistics concerning the frequency of thunderstorms in various regions of the world. Java has thunderstorms on the average 97 days in the year; Sumatra, 86; Hindostan, 56; Borneo, 54; the Gold Coast, 52; Rio de Janeiro, 51; Italy, 38; West Indies, 36; South Guinea, 32; Buenos Ayres, Canada, and Austria, 23; Baden, Wurtemberg, and Hungary, 22; Silesia, Bavaria, and Belgium, 21; Holland, 18; Saxony and Brandenburg, 17; France, Austria, and South Russia, 16; Spain and Portugal, 15; Sweden and Finland, 8; England and the high Swiss mountains, 7; Norway, 4; Cairo, 3. In East Turkestan, as well as in the extreme north, there are almost no thunderstorms. The northern limits of the thunderstorms are Cape Ogle, northern part of North America, Iceland, Novaja Semelja, and the coast of the Siberian ice sea.

USE French polish for taking out scratches on varnished furniture.

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