# SOME OTHER GREAT EXPLOSIONS

The Recent Black Tom Island Disaster Recalls Other Similar Occurrences Throughout the Country, in Which Lives Were Lost and Much Property Damage Caused

The fire and explosion on Black Tom Island early in the morning of July 30, as described in a recent issue of this journal, recalls others in past years that were not without their sensational qualities, and, in many cases, resulted in more lives being

The record for intensity had hitherto been held by another dynamite explosion which occurred not so far from the scene of the Communipaw explosion, when twenty-five tons of blasting dynamite on ships and a freight pier at the Jersey Central's yards exploded at noon on February 1, 1911.

The shock was plainly felt in Manhattan and Brooklyn and other parts of the city

and Brooklyn and other parts of the city, and some of the scenes recently witnessed were enacted on a smaller scale. No one knew at first what happened, and people turned in fire and ambulance calls and turned in fire and ambulance calls and rushed into the streets, just as they did on

July 30. But the alarm was not so great.

This explosion took twenty-four lives and injured about 200 persons. The property loss was estimated at \$1,000,000, which was largely restricted to the immediate neighborhood.

borhood.

One of the largest explosions, if not the largest, that ever happened in Manhattan itself was that which occurred in the yards of the Grand Central Station on December 19, 1910, when a runaway train crashed into the side of the sub-station at Eiffieth the side of the sub-station at Fiftieth street and Lexington avenue, breaking pipes which released a great quantity of Pintsch gas. This became ignited in some manner never fully understood, and there was an explosion which did great damage in the section and caused alarm all over the city. There were ten dead from this explosion and 117 injured.

The explosion was of great violence. A Lexington avenue car crowded with workers was passing the corner of Fiftieth street when the shock came. It was lifted off the tracks and flung down on its side on top of an automobile several feet away. Four passengers in this car were killed and many

injured.

Another startling explosion occurred in Manhattan on July 4, 1914, when a large quantity of dynamite, which the police said they thought was meant to be made into a bomb to be used in blowing up John D. bomb to be used in blowing up John D. Rockefeller's Tarrytown home, exploded prematurely early in the morning in the upper story or the roof of the tenement at 1626 Lexington avenue. Four persons in whose apartments the explosives were thought to be were killed, all I. W. W. workers, among them Arthur Caron, who had been a leader in the I. W. W. demonstration against Mr. Rockefeller in Tarrytown. The tenement house was badly wrecked, and nineteen persons in the house were injured. were injured.

#### Baltimore Had a Bad One

During the last few years there has been a long list of explosions which have caused great loss of life and property damage, both in New York and in other parts of the country. A few of the more serious ones which have occurred since 1913 are described below:

In March, 1913, the British freighter Alum Chine blew up at Baltimore, causing forty deaths and many injuries. The shock was felt all over the city and nearby towns, and the cause of the explosion was never satis-

factorily explained. In February of the same year there was an explosion of gas in a church in Missouri in which twenty were injured. The most serious explosions in New York at about the same time occurred in the subway in January, 1913, when one man was killed, and in a tenement house explosion the following March in East Twelfth street, when two children were killed and three hurt.

Six men were killed and sixty injured when

Six men were killed and sixty injured when grain elevator exploded at Buffalo in June, 1913, while in the month previous there had been a cannon explosion at Fort Moultrie, S. been a cannon explosion at Fort Moultrie, S. C., in which three were killed and eight injured. In April and May of that year there was an explosion in the Baker Castor Oil Company at Jersey City, in which one worker died and three were severely burned and another as a result of which the Atlas Powder Company's mill at Landing, N. J., was blown up with casualties of three killed.

In the following June there was an explosion at the Brooklyn Navy Yard in which the roof was blown off a building. In the same month an explosion on the torpedo boat destroyer Stewart resulted in the death of two spilors and the injury of particles. sailors and the injury of another. Dynamite exploded in the magazine of the Sunshine Coal and Coke Company at Uniontown, Penn., causing the death of three and injury to forty.

Five men were killed and two were injured in a sawmill explosion at Clarksville, Texas, in August, 1913, while in the same month 100 deaths resulted when a dynamite car jumped the tracks of a Mexican railroad in the suburbs of Tacubaya and exploded from the impact. In New York during the same month the most serious explosions resulted when powder used in a flashlight for a picture on the stage of the Gaiety Theatre resulted in the injury of three members of a cast rehearsing a play, and

when an oil can exploded, killing two women.
The month previously two workmen had been severely injured when blasting for the Catskill Aqueduct. In August, also, eighteen deaths occurred from an explosion at the East Brookside Colliery at Pottsville, Penn.

Du Pont Explosion Killed Six

Six men were killed in December, 1913, in an explosion at the Du Pont powder works at Gibbstown, N. J., and another powder explosion of the same month occurred in the Metuchen (N. J.) works of the International Praeposit Company, where three were killed. The month before an explosion of waste gaso-line in the sewers in New York had injured ten and caused much property damage. Another serious explosion near New York was that in the power plant of the Richmond Light and Railroad Company in Staten Island, when the blowing up of a boiler killed two laborers and injured four. The explosion occurred in October, 1913.

In February of the following year there was

an explosion in the Hercules powder works at Kenvil, N. J., in which five men in the packing house were killed. In the following month there was a gas main explosion in New York at Fifth Avenue and Twenty-third Street, which caused much damage. During this same month a gun burst at Sandy Hook while being tested, seriously injuring Lieutenant Pendle-

There was an explosion in the plant of the Mexican Crude Rubber Company in Detroit in May, 1914, during which ten men were killed, while gas explosions during the following month in Boston and Columbus, Ohio,

caused, respectively, two and five deaths and several injuries. In New York City during the same month there was an explosion in the gasolene washers of the Columbia Cleaning and Dyeing Company, in which two were fatally burned and three badly injured.

In May, 1914, the Government powder magazine at Panama blew up, killing seven and in-

zine at Panama blew up, killing seven and in-juring many. The steamship Jefferson, en route to New York and near her port, had a boiler explosion in May, 1914, in which eight were killed and three injured, and there were two killed the month previous in an explosion at the Uniontown, Penn., plant of the Du Pont Powder Company.

A tank containing hydrochloric acid burst in Jersey City in September, 1914, and the fumes spread, overcoming twenty persons in

the Erie Station nearby.

#### Gas Blast in Cleveland

In Cleveland there was an explosion of natural gas in December, 1914, in which seven persons were killed. The month before that one man was killed and twenty-six were injured when the Becker dye works in New York was wrecked. In October there was an explosion of a boiler at the Continental Hotel here, in which two men lost their lives and two were seriously injured. In March, 1915, at the Crew-Levick plant in New York there was a tank explosion in which five were killed and others injured, and in the same month several junk dealers of New York were injured by explosions when they attempted to break up

In April there was a premature explosion of dynamite at the Kensico dam which killed eight workmen. There were a number of explosions in New York during these months, which included an explosion of an ammonia tank of H. C. Bohack & Co.; a similar explo-sion at the Manhattan Refrigerating Company, which injured fifteen; a sewer explosion which lifted manhole covers for two blocks near Clinton Street, injuring several children, and a premature bomb explosion in the Brooklyn plant of the Vitagraph Company, which injured three motion-picture actresses. Dynamite which was being carried in an automobile in Syracuse exploded, killing four and injuring

fifteen.

#### In Oklahoma

A sensational explosion was that which occurred in Ardmore, Okla., in September, 1915, when a gasoline tank car blew up, wrecking two city blocks and killing forty-four persons. Fires were started by the burning oil and much additional damage and injury resulted. An explosion nearer New York occurred in July, 1915, when eight persons were burned in a cottage at Coney Island after an explosion of leaking gas.

In August the Biltmore Hotel in New York had an ammonia tank explosion, as a result of which the engineer was killed. About this time also several children were injured in the city streets when they played about a bonfire in which there exploded cartridges they had found and tossed in. Injury to passersby and an explosion was narrowly averted when some cases containing bromine were dropped into the streets at another place from a truck on

which they were being carried.

There was a benzol explosion at the Tennessee Coal, Iron & Railroad Company plant in October, 1915, at Fairfield, Ala., in which four were killed.

Another recent serious explosion was that (Continued on page 194.)

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FIREMAN'S HERALD, 225 Fifth Ave., New York. hundred delegates from the thirty-eight companies of the association voted.

Two new companies were admitted to the association, White Hose Company of Phelps and the Rose Chemical Company of Rose. It was voted to limit the membership to fortyfive companies.

The following officers were elected for the coming year: President, J. C. McLaughlin of Jordan; secretary, Thomas J. Heaver of Pittsford, re-elected; treasurer, William R. Courneen of Lyons, re-elected.

#### Massachusetts Permanent Firemen

(Concluded from page 184.)

when he spoke against the one day off in three plan for Boston firemen, he admitted that he had been paid to come to Boston to give testimony against the firemen. The speaker said that Croker, chief of the biggest fire department in the world, had not been made famous by his own acts, but by the work of the men in the ranks who had given their very lives in the extinguish-ing of great fires in New York. The speaker said that now the man who had been made great was turning against fellow firemen because he was being paid to do so.

#### Resolutions

A vote was passed instructing a committee to advance a bill asking for a twoplatoon system in the cities and towns of the state and also a bill that will give one day off in five to firemen in towns that have not as yet received the same. A vote was also passed to have a committee advance a bill to have a fund established for firemen and to have foreign insurance companies assessed two per cent. on the pre-mium income to supply the revenue.

In the evening a banquet was given to the visitors at the Taunton Inn with Lieut. Gov. Coolidge as the chief speaker; William H. Reed was toastmaster and addresses were also made by Mayor Flood, President Barry,

ex-President Steere and others.

#### Michigan's Successful Tournament

At a meeting of the Hancock, Mich., firemen's tournament committee held last week, reports on the financial end of the recent tournament in that city of the Upper Penin-sula Firemen's Association were presented and the committee members were very pleased to learn that not only had the tournament been a success fraternally and in point of good time for everyone, but that it was even more of a success financially. Of course the tournament was not held for the purpose of making money for the firemen or those who donated towards the firemen's fund, but as the matter stands it will be possible to pay quite a nice dividend to all concerned.

The tournament netted profits of \$2,100, it was reported at the meeting. It was decided to turn about \$500 of this amount over to the fire department because of their splendid services in making the tournament the success it proved. The remaining \$1,600 will be paid out in dividends to the businessmen and others who donated toward the tournament fund.

# Some Great Explosions

(Continued from page 187.)

which occurred in September, 1915, when a blast of dynamite in the subway excavation on Seventh Avenue carried away all the superstructure between Twenty-third and Twentyfifth Streets, sweeping down into the great hole a trolley car with its passengers and a brewery motor truck. Two passengers in the car were among the seven dead caused by the accident, and the others were laborers in the tunnel caught beneath the wreckage.

There were eighty-five persons injured. That the casualties were not greater was due to the

#### Proposals for Motor Apparatus

City of New Bedford, Mass., Office of Clerk of Committees, August 14, 1916.

The Committee on Fire Department hereby invites sealed proposals for furnishing one 75-foot motor aerial hook and ladder truck, for motorizing three aerial hook and ladder trucks, for four combination motor pumping engines and hose wagons, and for five service runabout automobiles, in accordance with specifications to be obtained at the office of the Clerk of Committees, Room 220, Municipal Building.

These proposals will be received at the office of the Clerk of Committees until Friday, September 8, 1916, at 8:00 o'clock P. M., and will be publicly opened by the Committee at the same time and place.

The bidder whose proposal is accepted must enter into a written contract with the city engaging to carry out the undertaking contemplated, and failure upon his part so to do shall be construed to be a withdrawal of the proposal made.

Proposals must be addressed to Samuel A. Goodfellow, Chairman of Committee on Fire Department, and plainly marked on the outside envelope the name of the article bid upon.

The City of New Bedford reserves the right to reject any or all proposals. and for five service runabout automo-

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fact that the planking that made the street

over the excavation gave way slowly.

The most serious previous subway accident due to an explosion had been in January, 1902, when, in the Park Avenue subway excavation, ynst below Forty-second Street, dynamite in a shanty exploded, causing six deaths and damaging the Murray Hill Hotel, the Manhattan Eye and Ear Hospital, the Grand Union Hotel, and the Grand Central Station. About 125 persons were injured and the property loss was put at \$300,000.

In the same year there was a serious explosion of fireworks, which caused fifteen deaths and seventy injuries, when on election night a crowd gathered in Madison Square to celebrate in connection with William R. Hearst's cam-

paign for Congress.

#### Ammonia Refrigerating Systems

(Concluded from first page.)

the ammonia fumes and ammonia helmets were

used to good advantage by some of the men.

Conclusion—The necessity of having a competent person in charge of a refrigerating plant was demonstrated by this explosion. If the importance of the safety valve had been realized and it had a the control of the safety valve had been realized, and it had not been removed, this explosion might have been averted.

The use of direct fire heat in connection with an ammonia system is dangerous, because not only does ammonia in certain proportions form an explosive mixture with air, but residue gases in absorption systems are liable to consist in large part of free hydrogen.

#### SERVICE NEWS FROM EVERYWHERE

In order to put the city of Lawrence, Kan., where it ought to be in the matter of fire pro-tection, Chief W. F. Reinisch includes in his annual recommendation to the city commission a budget based on a full paid department, the discarding of horse-drawn apparatus and the installation of additional modern equipment. The proposed salary schedule is as fol-

ment. The proposed salary schedule is as follows: Chief, \$1,200; assistant chief, \$1.080; nine men, \$9,840.

To ex-Chief John A. Lulsdorff, of Mankato, belongs the honor of being the first man in Minnesota appointed as instructor to a municipal fire department. Lulsdorff has been appointed to this unique and important office by State Fire Marshal Hargardine after a conference with city officials of Rochester Minnesota. ference with city officials of Rochester, Minn. For several months the Rochester fire department has been under the direction of a man whom the city officials believed efficient but in-experienced. Hargadine was called upon and after consultation he was asked to name a man expert enough in fire department work to manage the Rochester department for six months, instruct the firemen in their duties and bring the entire department with its equipment up to the highest possible standard of efficiency. The fire marshal knew of Lulsdorff and offered him the position, appointing him a deputy state fire marshal so as to give him full authority to make recommendations for any purposed changes in the Rochester department. "The Rochester city council will pay all the expenses of Mr. Lulsdorff during his service. He is extremely well fitted for the task assigned to him," said Mr. Hargadine in commenting on the appointment. "He has devoted many years and much of his own money in bringing Mankato's most excellent fire department up to its present condition. He has made an extensive study of fire departments and fire fighting companies in European

cities as well as in this country, and through-out the entire state of Minnesota I believe there is not a man with more thorough knowl-

edge of the needs of an efficient fire department. It was for that reason that I suggested



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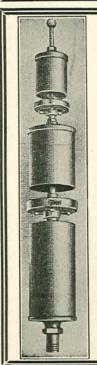
The pump, running on the slow speed of Ford transmission and with a sufficient by-pass into the tank to allow the shut off nozzle on the 150 ft. of chemical hose furnished, to be closed with safety nose turnished, to be closed with safety when necessary, will also carry 125 pounds pressure as a chemical engine with advantage that the tank can be replenished continually with soda and water, making a CONSTANT CHEMICAL engine.

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The members of the Holyoke, Mass., fire department have organized the Firemen's Progressive Club with the following officers: President, James Gately; vice-president, Robert McCarthy; secretary and treasurer,

The board of trustees will Arthur Sheard. be made up of Michael Riley, Patrick Kennedy, John Rohan, Michael Burke and John O'Hare. The main object of the club is said to be social.



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