

SPARK EXPLODES GASOLINE TANK

MANY LIVES LOST AND PROPERTY DAMAGE IS ESTIMATED AT \$200,000.

SAFER TO HANDLE DYNAMITE

Expert Says Gasoline and Benzene Vapor is an Invisible and Powerful Death Agent.

A large number of lives were lost by the explosion of a 250-barrel tank car of gasoline near the Santa Fe freight office in Ardmore, Okla. Occurring in the afternoon of September 27, the explosion shook down many buildings and threw burning gasoline in every direction. By 6:30 p. m. the fire was under control. The property damage is estimated at \$200,000. It was necessary to place the city under martial law, owing to the excessive amount of dynamite.

"It is safer to handle dynamite than it is to keep gasoline or benzene in a dwellinghouse or factory," said C. Albert Casser, chief of the Bureau of Combustibles of Newark, N. J., in Safety Engineering for August. These inflammable fluids are equally dangerous, wherever handled or stored, unless handled properly. "The vapor of benzene and gasoline is not visible ordinarily, and herein lies the danger," Casser added. "If it were a cloud of dust you could see it and get out of the way; but it is a part of the very atmosphere and you cannot see it. Depend upon it, however, the vapor is all about you, a danger which threatens death, although an invisible agent."

Charles E. Worthington, of Boston, discussing the dangers of gasoline, in Safety Engineering for September, observed: "It is in the 'migrating' quality that the greatest hazard of gasoline or naphtha lies. Most explosives require fire to be brought to them, but naphtha searches out the fire. It will run in a stream along the ground, follow down a stairway, seek out a crack in a floor at a considerable distance, and finding the fire flash it back until it reaches the point where the mixture of air and vapor is explosive (that point always exists somewhere) and ignites the vapor upon the surface (the equivalent of igniting the material). Instances are very numerous of this occurring at distances exceeding 50 feet, in many cases approximating 300 feet, and as concerns those under 50 feet, almost innumerable."

Owing to the characteristic of gasoline vapor just mentioned, it may be that the Ardmore explosion was caused by the striking of a match, or by a flame from some other cause, some distance from the tank car. The principal danger at the moment is that gasoline is so dangerous as dynamite, under certain conditions.—Miss Duluth.

SHOULD INTEREST YOU

Campaign to Be Carried on to Remedy Faulty Construction and Eliminate Hazards from Fire.

The campaign of education and publicity which is being carried on by the department is intended to teach the property owners to remedy faulty construction and the occupants to eliminate hazardous conditions, and also to furnish into the minds of all people, the insurance-paying public especially, the fundamental fact that the insurance companies do not pay the fire losses; the payment is made by those of us who buy fire insurance through agents of the insurance companies. Along this line of fire prevention, bulletins have been distributed with the purpose of calling attention to the various acts that cause so many fires—the acts of omission and commission. Its purpose is to reach not only the parents, but their children, and to encourage more carefulness in the home.

Fire prevention is a live subject. It is practical enough to interest the most practical and it admits of enough scientific study to delight the most earnest student. Its economic side has to do directly with the conservation and preservation of our natural resources. It furnishes a wide field for research. It deals with common everyday matters and should interest those in all walks of life.

The people must listen and understand before they will act in matters of fire prevention. The study of the subject in the schools will turn attention to it and ought to be the means of accomplishing definite results in a very few years.—J. L. Baldwin, Pennsylvania Fire Marshal.

The American fire water system \$100,000,000 per year, meaning \$20,000 per hour, or \$300 per minute. Much of this waste is right here in North Carolina. Do you care? If so, what are you doing or going to do to help stop it? Will you actively assist in the prevention and help to reduce the waste of insurance money?

PREVENT ACCIDENTS IN COTTON MILLS

HEALTH AND SAFETY OF EMPLOYEES AFFECT THE MAIN-SPRING OF PROGRESS.

Fatalities Do Not Figure Very Prominently But Great Loss of Time Is Due to Injuries.

It is well known that the economic factor has been and must still be the mainspring of the cotton manufacturing progress, as of all other industrial enterprises; but this does not shut out consideration of employees, whose health and safety affect the long result. To an extent regretted by all mill owners, the mill is still to many of its operatives only a stepping-stone, and the seeds of precaution and of safety-hal it has to be sown largely on a moving soil.

For the statistical portion of this necessarily limited discussion, I confine myself to the accident returns from the cotton mills of Massachusetts, whose records are well maintained and whose casualty experience is not the least favorable to the industry. What, then, is the extent of the reported injury sustained in the cotton mills of that state which represents the most advanced safety practice in the industry? These mills employed between July 1, 1912, and June 30, 1913, an average of 112,324 operatives, of whom nearly one-half were females, and in that time 7,480 casualties were reported. Fatalities do not figure prominently in the cotton mill risk. In the above, thirteen males—two of them minors—were killed, and 7,476 persons more or less injured; the injury ratio being 66 per 1,000 employees per annum. Seventeen hundred and sixteen (1,716) of the accidents, or 23 per cent, occurred to females. Specific mutilation was sustained in eighty-one of the non-fatal accidents, and involved the loss of four eyes, two hands, one foot, two or more fingers in twelve cases, one finger in sixty cases, and one toe in two cases. The other injuries varied from serious wounds and contusions to trifling lacerations involving no absence from work.

The disability due to these injuries was under two weeks in over 76 per cent, or in 5,711 cases; two to four weeks in 563 cases; four to eight weeks in 564 cases; eight to thirteen weeks in 295 cases; thirteen weeks to six months in 113, and over half a year in twelve cases.—John Calder, President Manufacturers Equipment Co.

"AS LONG AS SHE SHALL LIVE"

A recent article on the value of the continuous installment policy was entitled "Monthly Income Insurance." It was designed for distribution as an advertising medium to create a favorable atmosphere for the agent when he called to present his proposition.

Tucked away in one corner of the rather lengthy explanation of the advantages of this form of insurance were the words "As long as she shall live." How much more effective as a title these words would have been! What wonderful suggestive power lies in this simple phrase! What an appeal it carries to say right-minded man with loved ones! These words are the foundation of the whole structure of life insurance, but, unfortunately, until the installment provision was incorporated in the life insurance contract the foundation was often laid in quicksand and the structure so laboriously reared by the husband and father at a cost of self-denial and sacrifice to shelter his dependents was toppled over in some case before the grass grew on his grave.

No different now! Each man may now build his insurance structure with the certain knowledge that it will furnish shelter and protection as long as the shall live!—Northwestern Mutual Field notes.

THE FIGHT AGAINST FIRE.

Wooden shingle roofs constitute the next greatest hazard to the home, for they cover both periods of prosperity and depression, each year coming closer to the time when they may cause a fire, with a heavy damage or a complete loss.

After the roof is put on no attention is given to it until it becomes leaky, which, perhaps, is not longer than eight or ten years; but in the meantime, within five years, it becomes so weatherbeaten that it leaves a fire that is just as ignitable as lint cotton. It is known that all fires or chimneys burn out from coal soot or wood carbon at least three times during the fall and winter, throwing thousands of sparks on the roof. One can readily account for the many roof fires.—Safety Engineer.

The one way to make a manufacturing plant, railroad, or any place where people are employed as near an approach to perfect safety as can be had, is for the employer to make safety rules and see that they are enforced.

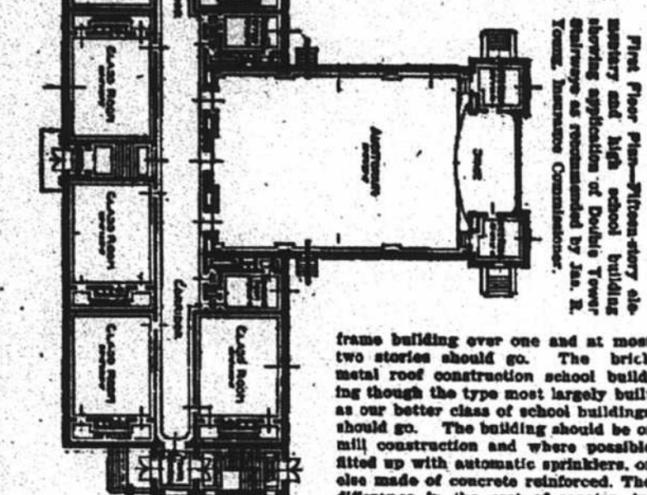
BETTER AND SAFER SCHOOL BUILDINGS

Shall Our School Buildings Be Made Safe For Our Children?

The law of North Carolina requires the Insurance Commissioner, who is ex-officio Fire Marshal, to see that school buildings, as well as other buildings in which the people assemble, shall be provided with sufficient exits to render them safe in case of fire. This is a most important and necessary duty and means very much especially for the safety of the children in our schools. Children are the most helpless ones in case of fire and their attendant panics, and yet, less attention is paid to the safety of school buildings than any other class of buildings in this state and throughout the whole country. Some one has said "They are built to burn."

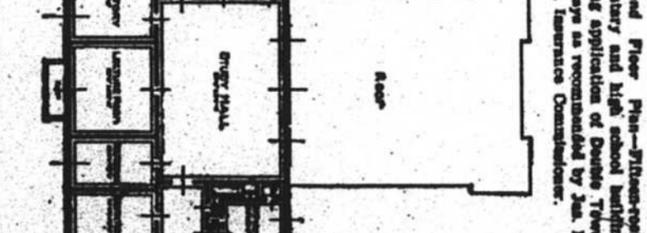
From time to time, alas too frequently, the people are startled and horrified at the destruction of some school building and the awful death of many of its inmates. So far these horrors have occurred in other states but the appeal to our people is to arouse them before a like disaster occurs in our midst. We boast of having erected a school building a day for the last twelve years in North Carolina, and yet, our best buildings are of the class, the burning of which has caused the most frequent and greatest loss of lives.

Better Buildings.
It will pay us in the end to erect a better class of school buildings. The



frame building over one and at most two stories should go. The brick metal roof construction school building though the type most largely built as our better class of school buildings should go. The building should be of mill construction and where possible fitted up with automatic sprinklers, or else made of concrete reinforced. The difference in the cost of repairs, insurance, etc., will make up the extra cost of building in a few years.

Safe Buildings.
Our school committeemen and officials may persuade themselves that they cannot erect buildings of the better type but can they refuse or fail to make them safe? It can be done and in the erection of new buildings at no additional cost and for buildings already erected, certainly at no greater



expenditure than is more than justified by the safety afforded, the guarding against the awful loss of life to the children of the state by school fires.

The two great dangers in school and many other fires are the rapidly spreading fire and the "smoke panic." Cut out the smoke filling the building and provide for conditions that will prevent the fire from spreading rapidly and every child can be saved without loss of life or even damage. Of course the better class of building the slower it will burn; but some plan is needed to bring about these conditions where the better class of buildings cannot be erected or where the more dangerous class is already erected and in use.

This can be done by closing all openings between the different floors and where the building is of hollow construction putting stops in the walls at each floor and at least once between floors. The place of stairways or means of communication from one floor to another can be supplied by "Double Tower Stairways" outside the main walls of the building. They are cut off from the building but enclosed and furnished two partitions, one for the platform and the other for the steps of stairways. No smoke can reach from one floor to another and under this plan even all the stairways or cause the smoke panic, the horror of all school fires and the main cause of the casualties.

Your attention is called to the cuts showing the first floor and second floor plans, and the double tower stairway. The size of this tower and its cost depends of course upon the size of the building, but in all cases it can be built practically for the cost of the inside stairway, made possible by the saving of space in the building and its cost.

LIFE INSURANCE GIVES PRACTICAL RELIEF.

Hon. A. Barton Hepburn, of the Chase National Bank, New York, says: "Life insurance management seeks no profit in the usual sense of that term; it holds and uses all net earnings for the benefit of the insured; the insured seeks no personal profit or advantage, but strives to protect his credit, shield his family, and soften for them the asperities of life after he has passed beyond the realm of personal activity. Life insurance is unselfish, it is the tangible result of the better motives of human nature embodied in the form of practical relief; although interwoven with and closely allied to business, its impulses and its execution are ecological, altruistic; it is the regard for one's credit and the love for one's family, incarnate, intangible, enforceable contract, an efficient instrumentality, which enables the dead hand in control, in order to soothe, assuage, cherish and support."

SUGGESTIONS ON PREVENTING WINTER FIRES.

Chimneys should be built from the ground up and never rest on wood supports. The setting of the woodwork will cause cracks in the chimney. Nor should the chimney walls be used to support joists or other woodwork. Soft brick and poor mortar are often responsible for defects in the chimney. Use a good quality of brick and cement mortar, up through the first floor and above the roof. Chimney walls should be at least eight inches thick, the feet of ample size and lined with fire clay or terra cotta. Never stuff up flue holes with rags or paper, nor cover them with cheesecloth, or anything but a metal stop. Chimneys should be cleaned frequently. Detectives stoves, boilers, furnaces, pipes and chimneys should be promptly repaired or replaced.—Fire Marshal Husey, of Kansas.

LIFE INSURANCE IS A PROTECTION

OFFERS SERVICE TO ALL AND CARRIES THE RISK OF MAN'S LIFE.

STOCKADE FOR THE FAMILY

Each Contribution is Small But When Grouped Together Becomes Sufficient For All.

Life insurance offers its service to all and bears the risk of life, which no man can afford to carry alone. It needs no disaster on sea or land to emphasize man's helplessness as an individual. The law of averages and the deaths occurring from ordinary causes every day are sufficient. Each person should attach himself to a group sufficiently strong to meet the possible loss. This he does when he secures an insurance contract. To a family, the loss of an individual life may be a tragedy; to a group it is but an incident in the work of the day. No one can say what a day may bring forth for the man who stands alone; but we know that the great current of life as a whole moves on securely in channels broad and deep. The danger to a single life is great. For the group, the element of danger does not exist at all.

Life insurance is protection—a refuge for all entitled to its care. Those who have read of the struggles of the early pioneers, know about the community stockade. The walled enclosure, built by the scattered farmers working together, furnishes the security which the lonely cabin, no matter how full of hope and happiness in peaceful times, could not give when hostile Indians were on the warpath. As the frontiersmen built with joint labor the stockade which served for the protection of each and all, so the responsible men of today build, by joint effort, a solid wall of security, behind which families can shelter when a foe, more relentless than savages, overtakes them. The building is a labor of love-of service—the kind of labor strong men give gladly for the security and happiness of those dependent upon them. The contribution of any individual is small—it would amount to but little in itself—but when united with the contributions of his fellows, becomes sufficient for the safety of all.—E. W. Randall.

WORTH REMEMBERING

A FEW SUGGESTIONS FOR THE PREVENTION OF FIRES AND LOSS OF LIFE.

- Ashes should be kept in metal receptacles and never in paper or wooden barrels or boxes.
- Old rags or waste should be kept in standard metal waste cans and contents removed and burned each night.
- Rubbish should never be allowed to accumulate in buildings.
- Gasoline, naphtha and other volatile oils should not be kept in buildings.
- Gas brackets should have rigid fixtures; where necessary to use swinging brackets, all exposed woodwork should be protected with sheet metal, leaving an air space. Metal balls should be placed over gas jets on low ceilings.
- Steam pipes should be kept from all wood or other combustible material.
- Open fire holes should be protected with sheet iron or, better, be bricked up.
- Electricity, when improperly installed, is hazardous; lamp cords should not be hung on nails or wrapped around any piping; paper shades should never be used. Confer with your city electrician when changes are contemplated. Do not allow employees to tamper with electrical installations.
- Stovepipes should be run direct to rick chimneys and never through floors or partitions; protect floors under and about stoves with brick, cement or sheet metal.
- Stairways should be kept closed and clear at all times; never place any stock or shelving thereon.
- Aisles of good width should be maintained at all times; never pile stock in front of windows or against doors, as it indicates the fireman in case of fire.
- Fire doors and shutters should be closed every night and stock should never be placed so as to hinder the ready closing of these fire stops.
- See that all fire extinguishing apparatus is in good working order.
- Damp lampblack will spontaneously ignite. Be well awoke and pulverized coal and charcoal when wet.
- Never use pirier matches; always the safety match; they cost no more.
- Requiring all doors to swing outward, especially in public buildings, may prevent the loss of many lives.
- All buildings over two stories high should be provided with fire-escapes and standpipes for fire department use.

BLAME INADEQUATE FIRE DEPARTMENTS

EVERY TOWN SHOULD PROVIDE NECESSARY PROTECTION FOR LIFE AND PROPERTY.

However Nearly Every Fire is Caused by Lack of Precaution Against Clean Buildings and Premises.

We frequently see comments in the press upon the fact that fires bring out the fact that the cities and towns are often provided with inadequate fire departments. This is a proper comment and a matter that should be brought very forcibly to the attention of those whom the people have charged with providing proper protection against fire. The great dangers to which our property is subjected calls forcibly for an adequate water supply and well-equipped fire department, and there is no excuse in our present conditions, for any holdup in making these and other necessary provisions for protection of life and property.

There is, however, a matter that the press would do well to bring forcibly to the attention of the municipal officers, and that is that the starting of a fire in nearly every case shows a lack of proper precaution. If our cities and towns were alive to the great advantages to be gained by using even ordinary precautions against fire, such as proper buildings, clean premises and regular inspections, then so many fires would not be started and there would not be so many occasions for the use of fire departments, and a great reduction would be made in the immense loss both of lives and property.

BEWARE!

There is a business concern somewhere in this country manufacturing a preparation known as solvite. The name is doubtless also the product of the same enterprising pirates. We call them pirates, not because we feel any uncharitableness in our heart, but because, as it seems to us, it would require gentlemen with souls such as pirates seem to have—remember, we are going on the printed descriptions we read of them, for we have no personal acquaintance with any—to advise the careless general public to buy two ounces of their preparation and, after dissolving it in two gallons of gasoline, use the inflammable combination in which to wash soiled outer garments. Of course, it isn't quite as dangerous as giving the baby a pound of gunpowder and a box of matches with which to amuse himself, but the scheme arranges itself somewhere in that category. As chemists and compounders of dangerous substances, the solvite don't seem to be a startling success. There are many household angels in heaven who wait there unexpectedly on the Gasoline Express.—Insurance Critic.

"THE MAN ON THE JOB."

Statistics agree that about 90 per cent of accidents are preventable, and this has not been disputed by any authentic authority, as far as the writer knows. The most important question to manufacturers and others employing labor, as well as to workmen themselves, is how best to go about the work to accomplish the desired results and reduce accidents to a minimum. Where the co-operation of owners and managers has been secured and machinery guarded and first-aid treatment given quickly, a marked reduction of accidents and hospital cases is in evidence; which proves that modern methods are giving good results and are undisputed proof in favor of the new system over the old way of using unguarded machines and wrapping wounds, without cleansing, and with any old rag that was handy.—Safety Engineer.

WARNING PASSENGERS.

People who insist on standing on the platforms of moving passenger cars place in jeopardy their own lives and the lives of others. It is the intention of the Pennsylvania Railroad to put a stop to this practice, if possible. The officers of the Pennsylvania Railroad have gone to the point of writing a letter to the general managers and superintendents of the various industries around Pittsburgh, requesting them to post notices in their factories, warning employees of the danger of standing on the platforms of moving cars.

FEDERAL SUPERVISION.

Much is being said and written about Federal supervision, and as far as the chances for any net results in the near future are probable, a further discussion is a waste of time. It might not be amiss to say that if the recent reinsurance of the Knights of Honor in the Continental Beneficial Association of Philadelphia by order of the District Court of East St. Louis is a fair sample of Federal work, then deliver us from all such.