

FIRE ASPHYXIATION.

A CHEMICALLY COMPOUNDED POWDER THAT LAYS THE FIRE FIEND LOW AND LEAVES HIS PREY UNHARMED.

REMARKABLE ACHIEVEMENTS OF KILFYRE, THE PRODUCT OF MODERN SCIENCE—A THREE POUND TUBE PUTS OUT THE FIERCEST BLAZE UNDER ANY CONDITIONS—IT ACTS LIKE MAGIC UPON ELECTRIC FIRES—WOMEN OR CHILDREN CAN APPLY IT.

Some one in attempting to dissect that subtle imponderable now known the world over as "American humor" has said that its essence is its unexpectedness. The same might be said of the demon fire. If that irresistible gentleman would send notice a day or two in advance of his intended visits he would at once lose all his terrors.

The prudent course is to be always expecting him and to make preparations for his suitable reception. With this laudable end in view, millions of dollars are annually expended in equipping and maintaining, in all towns and cities, fire departments of a greater or less degree of efficiency. The one main reliance of fire-fighters who have not kept pace with the march of modern science in extinguishing conflagrations is "water," and so freely is the antidote applied when procurable that in many, if not most, cases in cities the losses by water far exceed those by fire.

About four years ago a group of scientific men had their attention attracted to a new and marvelously simple weapon, so fatal to combustion, so adaptable to the use of the inexperienced, and so certain in its results, that they named it "Kilfyre," and, organizing a company, the Monarch Fire Appliance Company, with offices at No. 27 William-st., New York, proceeded to put it upon the market.

The fire destroyer, the Kilfyre itself, is a finely pulverized brownish powder, not unlike the fine dust one could scrape together on a clay road in times of drouth. This is contained in a decorated cylindrical metal tube 22 inches long and 2 inches in diameter. One end of the tube is closed by a self-sealing cap perfectly airtight, and fitted with a ring by which the tube may be suspended to a hook in any convenient situation. When needed for use the operator has only to pull smartly at the tube, the cap yields, remaining on the hook, and the fire-fighter has in his hands an open tube of the powder, which he has merely to throw at the blaze to see it instantly die out, leaving no residuum beyond the trifle of unconsumed powder, which the housemaid's broom will remove.

It would be well for the public to bear in mind that the name "Kilfyre" is a trademark, and that, although numerous worthless imitations have been brought forward, yet the Monarch Fire Appliance Company has in all cases prosecuted the infringers upon its rights, and will continue to do so. It has obtained an injunction from the courts forbidding the use of the name "Kilfyre," the use of a tube similar to theirs or the directions for the use of same. This was done not merely to protect their business interests, but lest the public might inadvertently be led into reliance upon a worthless powder which when put to the test would prove inoperative, thereby entailing heavy losses of property or it may be of life.

Many public exhibitions have demonstrated the wonderful efficacy of Kilfyre in subduing flames. The accompanying cuts represent one given in Buffalo last June, under direction of Chief McConnell of the Fire Department, and was thus described in "The Buffalo Courier":

"A wooden structure representing an open room, 12 feet long, 8 feet wide and 10 feet high, having at one end a chimney 35 feet high was erected. The interior of the structure was covered with a thick coat of pitch pine tar mixed with turpentine. To this was stuck a quantity of papers, and over all gasoline and kerosene oil were thrown in liberal quantities. At a word from Assistant Chief Murphy the papers were ignited and the building was ablaze in a flash. It made a roaring hot fire, which quickly drove the spectators back to a respectful distance. The flames ascended the chimney and poured out of the top in waves of fire. The fire was allowed to burn until it had gained a good headway, and the entire structure was a seething mass when, at a signal from Chief Murphy the demonstrator advanced close to the burning building and scattered the dry powder called 'Kilfyre' over the flames. The effect was instantaneous. The fire was simply outclassed and surrendered."

In practical use this powder meets all conceivable conditions. If the fire is burning in the curtains of a room, or the flooring or woodwork of a factory, or among bedding or furniture, a small quantity thrown on is sufficient. If the fire be first noticed in the ceiling, the powder pitched in the air makes a cloud of the dust which the indraught of the flames applies at once to the right spot. So, too, if a chimney or flue take fire. A little of the powder thrown into the fireplace is drawn directly to the scene of trouble and the fire is out. There are countless hand appliances for fire fighting vigorously advertised as doing all, and more than all, that can be desired of them, but they are, too many of them, subject to drawbacks, which, laying aside for the moment all question of their effectiveness when installed in perfect order, are sure to lead to their deterioration and failure when called upon after a more or less brief period of inactivity. They contain acids, the acids corrode the metals, and in time of need they are either sealed with rust beyond the power of mere hands to open them or their contents have so mingled (acids and carbonate of soda) that their boasted potency is gone.

Then, again, a fire protector must be proof against the ordinary variations of temperature. As a matter of fact, the liquid which forms the bulk of their contents is water, and has often been found frozen and useless when needed. Here is a brief item in point from "The Utica Observer" of February 18, 1895:

"After nearly a half hour's delay in learning how to use liquid chemical extinguisher, two houses were destroyed by fire. Investigation proved that the extinguisher was frozen. After thawing it out it was found to have lost strength and otherwise out of order."

"The Norwalk (Conn.) Hour" of January 5, 1900, has this to say:

"That the water in the extinguishers on Hope Hose wagon freezes was amply demonstrated to Lieutenant H. H. Wagner's satisfaction last Friday. When he went to refill the cylinders he found something hard inside, and he brought it into the kitchen to investigate. While examining it there was an explosion, and the chemical was thrown over Mr. Wagner's hands and clothes and around the kitchen."

Here another danger of the liquid extinguishers is rather more than hinted at—explosion. Any one at all familiar with chemistry knows that the affinity between strong acid and carbonate of soda is almost beyond limit in its power. Chain this power in a rust eaten, half-corroded chamber, and imagine the result of calling up the force by bringing the acid and base into contact. "The Chicago Record" of July 5, 1897, laconically puts it thus:

"L. Matthews, wealthy banker, used liquid extinguisher; exploded; part of skull gone." "The Nashua (N. H.) Telegraph" of December 20, 1898, says that "H. E. Farnum sues to recover ten thousand dollars for the loss of his eyesight. A liquid extinguisher in the hands of Mr. Worthen was discharged in his face, causing horrible burns and the loss of his eyesight."

Instances of these horrid happenings might be multiplied almost indefinitely. From Birmingham, Ala., is reported the case of Harry Mullen, who "used a liquid chemical fire extinguisher according to directions thereon. It exploded, breaking his wrist, knocking a hole in his jaw and tearing out four teeth. There seemed to be nothing wrong with the extinguisher."

So much for the liquid extinguishers. They claim to protect us against fire, but who shall protect us against the extinguisher?

The dry powder Kilfyre tube seems to be especially adapted for home use. First and foremost, it is absolutely innocuous to everything but fire. If the children get hold of it they may make the



THE GREAT TEST OF KILFYRE AT BUFFALO, N. Y. After burning about six minutes.

carpets dusty, or soil their dainty dresses, or, if they wet it, may smear their pretty faces and chubby hands, but there the trouble ceases. Whatever they may leave in the tube is still, as always, ready for duty. It remains to the end of time an active enemy to fire, needing but the shaking of the tube by human hands to conquer any combustion. It is the ideal "antiphlogistic." As proving that it does not deteriorate by time is a letter from Springfield, Mass.: "A fire broke out in the kitchen of my house, while asleep last evening, which would probably have caused my death had it not been for one of your 'Kilfyre' extinguishers I purchased nearly three years ago.

"From some cause the kitchen lamp exploded, causing the whole flat to be enveloped in smoke and flame. Just at this time a cousin happened to visit me, and, finding the kitchen on fire and the door locked, he got in through the window, and, noticing one of your Kilfyre extinguishers hung up, he opened it and dashed a small quantity on the flames, which instantly extinguished the fire and probably saved my life."

It is not too much to claim that any home, whether a city residence, an apartment or a country house, properly equipped with these extinguishers and inhabited by people of ordinary intelligence, is practically safe from fire starting on the premises. Any cook who can use a flour dredge can use a Kilfyre tube, and thus render the kitchen, where most of the dwelling house fires originate, exempt from danger.

Another point of danger is the lace curtaining about the windows. The Rev. Henry Dows, of this city, writing under date of January 26, 1899, says: "On the evening of the 15th of January a certain took fire in my house, threatening the most serious results. The fire was extinguished by the use of a small quantity of Kilfyre."

Leaking or broken gas meters are fruitful of fires—fires most difficult to overcome with water or ordinary appliances, but for Kilfyre they are as easy to overcome as any other.

The Long Acre Restaurant realized that fact and says May 9, 1899: "Kilfyre was used on a gas flame fire in the cigar store 1,488 Broadway, and saved that store and our restaurant, and the fire was put out by the time the Department reached here."

Citizens of New-York have had many ocular proofs of the obstinate intractability of fires in the streets when fed by escaping gas. In some cases they have been allowed to burn for a whole day, as to pour water on them would only rupture the mains and spread the flames. The Western Union Telegraph's electrical engineer, Mr. A. S. Brown, tackled one with Kilfyre and sends the re-

sults: "About 9 a. m. August 25 last (1899), fire was discovered in a subway manhole at Broadway and Exchange Place, in this city, where are a large number of telegraph cables. Upon removing the covers an ugly blaze developed, which two of your tubes completely extinguished. This practical test of the tubes was very satisfactory to us. There is one phase of the fire fighting problem wherein more than in any other the pre-eminent utility of the dry powder Kilfyre is apparent, and that is in guarding the telephone and telegraph exchanges and their enormously costly apparatus of switchboards. Every tyro in electrical matters knows that to turn a stream of water upon a switchboard is to utterly ruin it then and there. Every employe in the electrical exchanges and telephone rooms knows how prone the fire fiend is to start his pranks amid these costly surroundings. A few tubes of this dry powder extinguisher insures the safety of switchboard, operatives and wires.

J. E. Farnsworth, general manager Southwestern Telegraph and Telephone Co., writes under date of January 2, 1900, from Dallas, Tex.:

"It was only a few days ago that the wires in our switchboard room here at Dallas caught fire, and Kilfyre was used with great success."

Frank Wood, superintendent of two great telephone companies at Wilmington, Del., and Lancaster, Penn., says: "It affords me great pleasure to recommend the use of Kilfyre dry powder extinguisher to any and all telegraph or telephone companies for use around their offices where there is a liability of crosses from electric light, trolley or other sources."

"It would be useless for me to tell a practical electrician the effect a liquid chemical would have upon their boards. Kilfyre is the only safeguard that I know of that can do the work in the right place and not damage other portions of a cross-connecting or switch board. A switchboard saturated by liquid might as well be destroyed by fire, so far as its future use is concerned, for it would be no better than junk. . . . A plenty of Kilfyre extinguisher and no liquid is my motto for the protection of all electrical devices."

Cotton mills are rightly classed as extra hazardous. From a mass of testimony on this use of the Kilfyre the following is a fair example. It is dated June 19, 1899, and is from Henry L. Witham, superintendent Fulton Bag and Cotton Mills, Atlanta, Ga.:

"We had a fire in one of our breakers the other day, and for the second time tested the efficacy of your Kilfyre tubes.

"The fire had originated in the basement, and was drawn through the trunk up to the breaker



THE SCENE IMMEDIATELY AFTER THE APPLICATION OF TWO KILFYRE EXTINGUISHERS.

machine on the fourth floor. We immediately pulled down one of your tubes, and scattered the contents on the burning cotton, between the cages, and in two minutes the machine was running again without any perceptible damage to either the machine or cotton in process."

There was a grand exhibition in the Madison Square Garden about a year ago, and at the time alluded to there were about ten thousand people in the building. They all got home safely, and were not even frightened—all because of Kilfyre, and were the statement of the exhibitor's engineer:

"A fire was caused by the ignition of some oily waste under the flooring of our exhibit at Madison Square Garden. We used water without effect, and when Kilfyre was brought into play the fire was instantly extinguished."

To estimate properly the practical value of such an homeopathic invention as this, which subdues fire with a dry powder, it may be wise to be guided somewhat by the verdict of great industries and corporations, which, having no souls, base their opinions entirely upon the money value to them of the thing of red.

Judged by any such standard the Monarch Fire Appliance Company may justly feel that their Kilfyre has passed the stage of uncertainty, and has become an assured and certain success.

Uncle Sam's Army officers are utterly ruthless in the detection of humbugs and the exploding of empty theories. They made a crucial test of Kilfyre, and Major Summerhayes, of the Quartermaster's Department, writing under date of October 5, 1899, from the Governor's Island headquarters, Department of the East, says:

"The test made here at Governor's Island was perfectly satisfactory, and, although there was a strong wind blowing and the fire was well under way, it was extinguished in a few seconds.

"It gives me pleasure to recommend your 'Kilfyre' as the best thing of the kind I have ever seen."

The United States Government, following this up, is daily ordering the tubes in large numbers for use in arsenals, barracks, hospitals, transports and army posts.

The Standard Oil Company is credited with a thorough knowledge of its own affairs, and as its dealings are largely in naphtha, benzine, gasoline and other highly inflammable products, its choice of a fire fighting appliance should carry great weight. They are ordering supplies of Kilfyre from the Monarch Fire Appliance Company, and are equipping their refineries and agencies throughout the world with the tubes.

Firemen know how useless it is to attempt to fight an oil fire with water. It merely spreads the trouble. The writer saw an experiment recently which illustrated this. Into a basin a quantity of naphtha was poured and ignited, then water was dashed on in quantities, and the fire blazed more merrily than before. A pinch or two of the innocent looking Kilfyre was thrown upon it, and the fire was gone.

The Fire Department of the city of New-York, through its secretary, thus indorses Kilfyre: "I am directed by the Commissioner to notify you that upon recommendation of the Chief of the Department, he has authorized the expenditure of an appropriation for the purchase of Kilfyre extinguishers for this Department."

The Street Cleaning Department of New-York has adopted the Kilfyre tubes for the protection of its great stables, and right here is a hint for



NO NEED FOR FIRE DEPARTMENT.

those living in the country whose stables are at the mercy of the carelessness of any coachmen or grooms handling the lights. The water supply at such places is usually of the slimmest, and served in buckets. A flash in the haymow, and the stables, horses, cattle, carriages and harness are hopelessly gone—unless—that is a consoling thought—unless the owner has a few of those tubes hanging about. Then the damage is not worth mentioning, and the grooms have learned a valuable lesson.

As stated elsewhere, the absolute adaptability of Kilfyre for electrical plants is established, and it is practically acknowledged by the action of many telegraph and telephone companies in adopting it. The Erie system of the Bell Telephone Company is equipping all its exchanges with this appliance. So are the Western Union Telegraph Company, the Postal Telegraph Company and the New-York and New-Jersey Telephone Company. The Edison Electric Illuminating Company also gives it the practical indorsement of equipping its stations with the tubes.

The Consolidated Gas Company, that monster aggregation of capital and brains all familiar with what stands next to electricity as the modern incendiary—gas—is purchasing the tubes in large numbers.

The Equitable Life Assurance Society uses Kilfyre as its reliance against sudden outbreaks of fire.

The hotels of this city are always on the alert for a weapon to use against fire, and such an endorsement as the following—given in part only from Stafford & Whittaker, proprietors of the New Netherlands and the Imperial hotels, is very competent testimony:

"We think it only fair to tell you that within a short time after receiving the equipment (Kilfyre) a fire broke out in the Imperial Hotel, which was quickly extinguished by the use of a small amount of the compound out of one of your extinguishers in the hands of one of our employes.

"We find that the extinguisher is simple to handle, exceedingly effective and does no damage whatsoever to the material with which it comes in contact. We are highly satisfied with our purchase and feel free to say that it should be in every hotel and apartment house in the country, and we cheerfully recommend it for that use, as in our opinion it is the finest appliance for the purpose on the market."

In view of the wealth of testimony herein adduced, which is but a tithe of the flattering reports coming in from all trades, callings and conditions it is not surprising that the Monarch Fire Appliance Company, whose offices are at 27 William street, in this city, should have received for their Kilfyre the Highest Award from the National Export Exposition in Philadelphia.

In taking precautions against such a foe as fire it is not wise to study too closely the cost. If two ounces of prevention are better than one, the two ounces should be forthcoming, but it is surely no detriment to Kilfyre that it is estimated to cost but one-fifth as much as the liquid extinguishers. The saving in water damage alone, supposing the fire to go no further than its outbreak, would offset many times over the cost of equipment. Again, liquid extinguishers weigh from thirty to one hundred pounds, while a tube of Kilfyre weighs three. The claim is readily made by its proprietors that there are more Kilfyre tubes sold to householders than all other fire extinguishers combined, which speaks very well for the intelligence of the average householder.