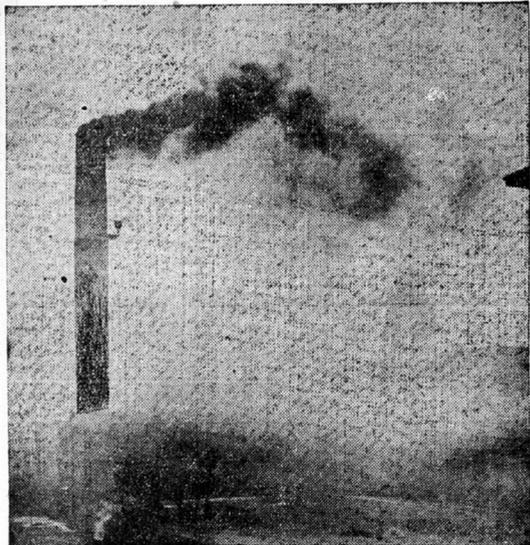


PICTURES WHICH SHOW THAT SMOKE CAN BE PREVENTED.



A FOURTH AVENUE STACK AT ITS WORST.

Unnecessary smoke must be prevented in Minneapolis. This is the determination of the Minneapolis Real Estate board, which has already secured the conviction of one fireman who was guilty of inattentive stoking.

One of the most convincing arguments employed by R. T. Boardman, who acted as attorney for the board in this case, was a series of photographs recorded herewith. The pictures tell their own story. Two of

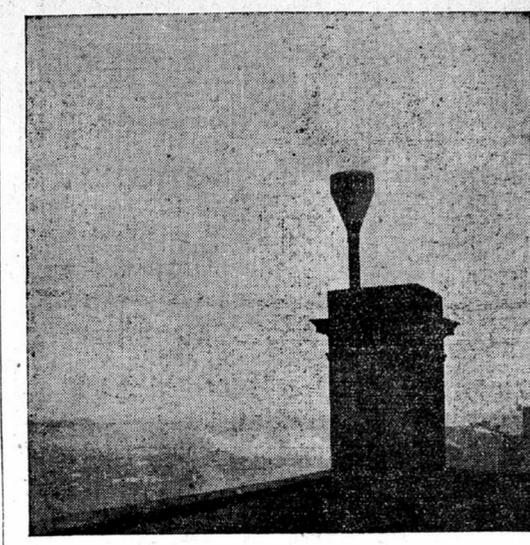


A NICOLLET AVENUE CHIMNEY THAT POLLUTES THE AIR FOR BLOCKS AROUND.

them are smoking like battleships going into action, while the third chimney shown appears not the slightest trace of smoke, altho it was taken on a cold day and the chimney photographed was on one of the largest office buildings in the city. With the Real Estate board behind the agitation, a great deal more may be expected of the antismoke crusade than has ever been possible when the matter was wholly in official hands. In St. Paul the antismoke crusade

has had notable results. Even locomotive firemen within the city limits have been obliged to watch their fires with special care, while factory owners and the managers of large business and office buildings have come to appreciate that the non-smoke method of firing is not only desirable but is the only safe plan. After all, the secret of abolishing smoke is more one of stoking than it is of scientific appliances for consuming the products of combustion. Care-

ful firemen will not only prevent smoke, but they will make the same amount of fuel go much farther than the fireman who throws in the coal, opens the drafts and lets 50 per cent of the carbon go up the smokestack. The Real Estate board is now making a careful survey of the city in the early morning and late afternoon, which seem to be the periods when the smoke affliction is most noticeable. Whenever practical, photographs will be made of the chimney at its worst, and



THIS CHIMNEY HAS A SMOKE CONSUMER. IT RARELY DISCHARGES ANY MORE SMOKE THAN SHOWN IN THE PICTURE.

these will be used as evidence in court. The main difficulty, however, is not in securing evidence that the chimney is smoking, but in proving beyond a peradventure that the smoke is unnecessarily thick. It has been argued that

a heavy pall of smoke is a good advertisement for any city, indicating great industrial activity, but the Real Estate board, the members of which are vitally interested in keeping the city at its best, evidently do not think so.

FIGHTING FIRE IS LIKE WAGING WAR

Chief Canterbury Tells How the Campaign Against the Inhuman Enemy Is Planned and Executed—Lightning-Quick Decisions and Fearless Actions of Firemen.

"What is the theory of fire-fighting? Is the science of warfare against the flames as exact as the science of war against a human foe? Interest in this heretofore and most fascinating of games has increased in proportion to the interest awakened by the recent disastrous Minneapolis fire, in which several human lives were sacrificed. Modern war, with its war colleges, its boards of strategy, war boards, etc., has been reduced to a science as exact as any other profession. Fire-fighting is a species of warfare as valorous and as hazardous as the contests of armed men, requiring on the part of a fire chief, supervision as general, a mind equally alert and a readiness to take advantage of any opportunity or to meet any new onslaught of the foe, as quick as that which the general in the field must exercise. Can this species of warfare be reduced to a science as exact as that exercised by the war boards of nations? This was the question put by Chief Canterbury of the Minneapolis fire department.



J. R. CANTERBURY, Chief of the Minneapolis Fire Department, Who Describes Fire Fighting.

The analogy of the fire-fighter and the man who meets an armed foe, rifle in hand, is an exact one. There is this difference: The soldier fights a foe who wages war under more or less humane restrictions, and, altho flying at the throat of his adversary, will show mercy to a conquered foe. The fireman battles with an insidious enemy, treacherous and aggressive—no enemy that knows neither pity nor mercy. The loss of two men in the recent fire in Minneapolis shows a percentage of loss not less than that which is experienced in the conflicts waged on the plains of Manchuria or in the death grapple at Port Arthur.

Like a Battle of Arms. The analogy can be carried farther. The commander of an army lays out his plan of campaign, has the different arms of the service at his beck and call to cope with the strategy of the enemy, and from his central position directs the battle. The chief of a department fighting a fire is also the commander of an army and is battling with the flames, and frequently conducts a battle in which the strategy of a Von Moltke or of a Napoleon is necessary to bring victory out of what seems inevitable defeat. He, too, has the different arms of the service at his command. There is the different fire apparatus, the different branches of the service, the water towers, the aerial trucks, the water towers, the engines, the hook and ladder departments, etc., and all of these, with the men who direct them, must be held wisely in hand by the chief. A battle against fire, Chief Canterbury thinks, is even more difficult than a contest waged against men. What men may do may be inferred by other means. What fire may do can never be determined in advance.

"How do you plan your campaign against a fire?" was the very general question put to the head of the Minneapolis department. "Find the Fire; Put It Out." "The first thing," he sententiously replied the chief, as he whirled in his chair and looked grimly at his questioner, "is to find the fire. The second thing is to put it out. There you have it in a nutshell."

The statement admitted of no argument, but the fire-fighting chief was induced to indulge in a little more detail. "That explanation is more explicit than it seems," continued the chief. "You can't sit here in the office and lay out a plan of campaign against a fire. Neither can you formulate a general theory of fire-fighting to be used in certain contingencies. This is because no two fires are alike. They vary with the condition and place of origin, with the condition and shape of the building, etc. Besides, you can't tell how a fire will act until you have it extinguished. That is why your first duty is to find the fire, and the second to put it out."

"What is the hardest kind of fire to fight?" was the next question. "Well," the chief continued, as he puffed reflectively at a cigar, "leaving out the question of material feeding the flames, the most dangerous kind of a fire is the one which starts in a basement."

Having warmed up to his subject, the fire chief went into a wealth of detail, drawing freely on the recent fire to illustrate his explanations. "I can't explain this to you better," he said, "than by relating in part the

story of our fight of last week. Of course, there is at least one general theory that can be followed in fighting a fire, and that is to surround it. How to do this will depend entirely upon conditions. The plan of the battle is generally formulated on the way to the fire, and is completed immediately upon arrival and when we learn exactly where it is. Then the chief takes some central position, usually at the front of the building, where he can be found. When he assigns his different chiefs to their respective stations, and as the different departments come up, as in the case of a big fire, he tells them what strict report to make. These chiefs make frequent reports to him, so that he knows just how the fight is progressing and can easily oversee all parts of the battlefield and knows what orders to give and where to send reinforcements.

"If the fire in the Peck building of last week had started in the upper story, the difficulty of this kind of fighting is simple. We would have flooded the floor beneath it and in that way kept the fire from going down. But when a fire is in the basement, the task is different and much harder. "When I started at the Peck building I found that the men had already made openings in the floor and had inserted the cellar nozzles. These nozzles have a curved end, enabling the firemen to throw water between the floors. But the difficulty of this kind of fighting is increased by the fact that it takes only a small fire in a basement to fill the story above with smoke, so that remaining within the room is certain death. Then there are, as always, stairways, elevator shafts, etc., which carry the flames upwards, as was the case in the Peck building. "Another difficulty of the basement fire is the fact that there are usually few windows from which the fire can be reached. "In the case of the Peck building, another peculiarity of fires was illustrated. At first it seemed like a harmless affair, but no fire is harmless until it is absolutely extinguished. It suddenly assumed terrible headway and, do what we could, we could not stop its progress. The battle then became one for the salvation of surrounding property, one of the prime duties of a fireman."

How Firemen Meet Death. "There is little choice as regards hazard in the fire service," the chief replied, in answer to a question as to what was the most dangerous branch of the service. "It is all equally dangerous. "The hook and ladder men, armed with their hammers, cutting boxes, sledge hammers, etc., must accompany the hose men, their duty being to pull down ceilings, make holes in walls and otherwise assist the nozzle men in getting at the fire. "No fireman can tell just when he is to be cut off, and they become fatalists to a certain extent. Again drawing from the recent fire, the firemen who were with Fellows when he lost his life,

had no idea of danger. We had men on every story throwing water into the Peck building. There must have been an explosion in the Peck building, or the falling of a ceiling caused the flames to shoot over thru the runways into the Boutell building. "Anyhow, Simeco, Kirchoff and Fellows found themselves surrounded by flames. One of the men went to the stairway which was built about the elevator. Flames and smoke choked him. He told the others to run for their lives. Fellows stopped to put on his coat and started toward the elevator shaft. Kirchoff, who was halfway between him and the window, looked around and a blast of flame caught him and he dropped on all fours to make for the window. Fellows was half turned around, and my theory is that he never got any farther. I do not believe he went down the elevator shaft. "Fellows' fate simply shows how precarious is the occupation of the fireman."

"No there is no science or system adopted by firemen for their own safety. They must trust to their judgment to act as the occasion necessitates. Of course, all firemen know that the air is best nearest the floor, and if it cannot be obtained there it cannot be obtained anywhere. Then they wear nose masks, which are merely moist sponges, which they wear over their faces. The only other protection is the aluminum helmet which will ordinarily protect the head from falling bricks or glass. For the body there is no protection other than that afforded by their clothes. "Containing Unquenchable Flames. "But to go on with our illustration," continued the chief. "When the Boutell building started, we saw there was no chance of saving it. When a fire gains certain headway, water thrown on it only increases its intensity, just as water thrown on coal will make it burn more fiercely. Our task was to save the Powers' building, which was directly in front of the Peck building. We threw light streams on the front to keep down the intense heat until we could get hose inside the building to get the fire under control. We were able to do that, and if we had been delayed only a few moments, the building would have gone up like tinder."

"The difficulty which we experienced at first in preventing the fire from reaching Powers' was to get enough pressure to send the water to the top of the building. The system for getting high pressure is simple. It consists in the use of the turret nozzle, that is in turning several hose lines into one nozzle. However, care must be exercised in doing this. For instance if one line is near the fire you get, say 140 pounds pressure. You attach another line, which is connected with an engine farther away, and which gives you a pressure of only 120 pounds, the 140 pounds pressure would be reduced to 120. It is necessary to get equidistant lines attached to the turret nozzle. "Chemicals are useful in putting out incipient blazes, but where fire has gained headway they are of little use. The only thing to do in case of a big fire is to flood the building with water so long as water will do any good. "Saving Human Lives. "The fireman is not only a firefighter. He is a lifesaver as well. One of the elements of the education of a fireman is to know how to save life—how to carry unconscious forms down an uncertain ladder and to do it expeditiously and safely. "During two months in summer the Minneapolis fire department exacts training with the pomper ladder. This consists in scaling high buildings by means of these ladders, which are carried as the fireman ascends. The hooks at the end of the first ladder are attached to a window. The fireman scales this first ascent, carrying the second ladder with him. The second ladder is hooked to the window in the next story and the first ladder is carried. This is kept up until the desired story is reached. "The best system in carrying out a person from a burning building and down a ladder," Chief Canterbury explained in the progress of his talk, "is to keep the man or woman in front of you. If he or she is conscious, they will render assistance in hanging to the ladder. If unconscious, the manner of handling the person will depend upon his or her weight. Ordinarily the fireman can keep the person he is rescuing between him and the ladder and roll the body down. If light

enough, the left arm will serve to hold the person being rescued while the right hand can direct the progress down the ladder. "Chief Canterbury believes the present-day fire engines are too small. He thinks it would be economy to use larger engines, even if they cost more. "Problems in Plant Embryology," Dr. H. L. Lyon, F.M.B.S. "Recent Work in Mycology and Plant Pathology," E. M. Freeman, F.M.B.S. "Collecting Trips in Mexico," E. W. D. Holway, by invitation. "A Remarkable Growth of Orobanchae Ludoviciana," C. A. Ballard, F.M.B.S. "Mushrooms and Mushroom Clubs," Dr. Mary Wheatons, F.M.B.S. "The Minnesota Botanical Seaside Station," Conway MacMillan, F.M.B.S. Social hour.

For any case of nervousness, sleeplessness, weak stomach, indigestion, dyspepsia, try Carter's Little Nerve Pills. Relief is sure. The only nerve medicine for the price in the market.

BOTANISTS TO MEET

State Association Meeting Will Be Held Thursday.

The annual meeting of the Minnesota State Botanical association will be held Thursday in Pillsbury hall at the state university. The meeting will close with a social. The program is as follows: "Present Problems of Cytology and Taxonomy," Conway MacMillan, F.M.B.S. "Problems in Plant Embryology," Dr. H. L. Lyon, F.M.B.S. "Recent Work in Mycology and Plant Pathology," E. M. Freeman, F.M.B.S. "Collecting Trips in Mexico," E. W. D. Holway, by invitation. "A Remarkable Growth of Orobanchae Ludoviciana," C. A. Ballard, F.M.B.S. "Mushrooms and Mushroom Clubs," Dr. Mary Wheatons, F.M.B.S. "The Minnesota Botanical Seaside Station," Conway MacMillan, F.M.B.S. Social hour.

FINE STATUE OF CAPT. JOHN TAPPER JUST FINISHED BY MRS. BACKUS

The friends of Mrs. George J. Backus of this city will soon have the pleasure—and the public will share it later—of admiring a life-size statue of that sturdy pioneer, Captain John Tapper, which she has just completed. Several times in the past five years beautiful examples of the sculptor's art have come from Mrs. Backus' hands, but this last is the most ambitious and probably the most artistic.

In order to understand its full significance, one must know something of the captain's history. In 1840, at the age of 20, he arrived in Mobile from his home in Dorsetshire, England, on a cattle ship, and in the year following he was a pioneer settler in the building of Fort Atkinson in Iowa. Two years later he reached Fort Crawford at Prairie du Chien, and in 1840 arrived at Fort Snider, where he was employed by Franklin Steele until the breaking out of the Mexican war. Then he joined the United States forces in Mexico, going from the fort with Dr. Turner and took part in numerous engagements in that conflict. At its close he returned to what is now Minnesota.

Before the organization of the territory, which took place in 1849, he had been to ferry the few settlers in this vicinity across the Mississippi just above the raging rapids on Anthony's Falls. His route from the west side of the river to Nicollet island was that now marked by the steel arch bridge. He located on Nicollet island, where the Eastman residence now stands, the property at that time of Franklin Steele, and for the next six years, day and night, answered the call of all who wished to cross the Mississippi. In that period he ferried thousands of persons, teams and cattle over the river. In 1855 the first suspension bridge was built, the first bridge ever built to span the Mississippi at any point from its source to its mouth, and on this bridge Captain Tapper was installed as tolltaker.

He assisted in 1849 in erecting the first house built on the west side of the river, and in the following year, while Colonel John H. Stevens, its owner, was absent on a bridal trip to the east, planted a garden on the site of the present union station from which the colonel and his bride gathered fresh vegetables when they came to their new home. During those strenuous years Captain Tapper was known by all who knew nearly all the settlers within a radius of 100 miles of Minneapolis. He has survived most of them, and is still in perfect health and retains his mental vigor. He represents the highest type of the sturdy pioneer, rugged, honest, truthful and aggressive.

The statue which Mrs. Backus has just completed embodies all these characteristics. It shows him with his coat off and evidently in a reminiscent mood suggestive of tales of long ago. The likeness is perfect; the lines of the figure are those of the virile old man who has stood the tempests of eighty



—Photo by E. A. Bromley.

years and who seems able to withstand those of the next twenty. There is a project on foot among his friends to have the figure cast in bronze and later, if the city authorities are willing, to place it in one of the niches on the steel arch bridge. The statue is now in the hands of the men who are making the plaster cast and will soon be on exhibition. There have been but two statues made

by sculptors resident in Minnesota, the one of Ole Bull by Jacob Fleide being the first, and that of Captain Tapper by Mrs. Backus, the other. Part of the statue of Governor Pillsbury, which now adorns the university campus, was made here, and the rest in New York. Mrs. Backus' new work is considered by connoisseurs who have seen it to be an achievement at least equal to either of the other two.

IOWA GIRL MARRIED WHEN BUT 9 AND DIVORCED AT 10

Husband Was 65 and Looked His Age—First Real Christmas for Gertie Trusty—Remarkable Matrimonial Story From Iowa.



JOHN LEEPER, Aged 65, Wedded to 9-Year-Old Gertie Trusty and Now Divorced.



MRS. GERTRUDE TRUSTY LEEPER, A Grass Widow Who Will See Her First Christmas Tree Tomorrow.

Special to The Journal. Des Moines, Iowa, Dec. 24.—Married at 9, divorced at 10, her first Christmas tree when a grass widow at 11, a little girl in short skirts will dance with glee about a candle-light and gift-laden tree in a cozy home in Brighton, Iowa, tomorrow morning. There will be thousands upon thousands of Christmas trees all over the broad land, but none like this—for this will be the first in the life of a little girl, whose hair hangs in pigtail down her back, whose skirt does not reach to her shoe tops by several inches, and who wears with all the eagerness of a young girl's heart for a doll that will open and shut its eyes and say "mama" and "papa"—this little girl who stood before the altar two years ago and became the wife of a man seven times her age. Gertie Trusty, girl, wife and widow all in one, will know her first Christmas tomorrow. Now that she has been a wife and is a widow, Gertie Trusty is just about to become a little girl.

Married When but Nine.

At the age of 9 Gertie became the wife of John Leeper, whose 65 years were evident in face and figure. The bride-elect, as she stood before the preacher and promised to be a faithful wife, was an odd sight. Her hair brushed straight back from her forehead, parted severely in the middle, was gathered in the "pigtail" braids of young girlhood and straggled down the line of dress buttons at her back. As for the dress itself, it was no creation of the modiste. The wedding dress included, "something old and something new, something white and something blue," was disregarded in Gertie Trusty's case—everything was old, and the wedding dress was the every-day, short-skirted dress. There the 9-year-old girl stood by the side of the 65-year-old man, and in piping treble answered "I will" to the solemn words of the preacher. Gertie Trusty was Mrs. John Leeper from the time she was 9 until shortly after she had passed her tenth birthday. She was a good and faithful wife to the best of her ability. She followed her husband to Arkansas and brushed straight back from her forehead, established the new home. Life settled down into commonplace, Monday washing, Tuesday ironing, Wednesday sweeping, and so on thru the week. Other little girls passed on their way to school, trifled at each other and laughed in childlike glee as they coasted and bobbed on the snow-covered hills or danced away to the pictures of the good old summer time, but Gertie Trusty Leeper was a wife, and there was housework to do, so she stolidly stayed at her tasks, but many a time her heart must have been far away with the romping, rickling children of her own age.

Action for a Divorce.

Almost a year passed and the Leepers returned to Washington, Iowa. The girl-wife said she had been cruelly

abused in the meantime. She had a pitiful tale to confide to a tender-hearted neighbor. Soon the officials heard of the matter; outside of the wilds of Africa such a case had not been known. A young American girl bound to a man seven times her age for life. Such a thing might go unreported and unnoticed among the Georgia crackers, but not among the cultured people of Iowa. Gertie Trusty was induced to sign a petition asking for a divorce from her husband. It did not take long for the judge to decide the matter. When the plaintiff took the witness chair her feet did not touch the floor, her hair hung behind her in "pigtails," and she told her story in the same childish treble with which she had answered the clergyman a year before. So told a story of cruelty, corroborated by the necessary witnesses. Ten minutes later Gertie Trusty walked out of the courtroom—10 years old and a grass widow.

Finds a New Home.

What to do with her, now that she was literally born again, was a question, soon settled by a kind-hearted, charitable family. In the family of R. L. Davis of Brighton, Iowa, Gertie Trusty found a home. There day by day, she knew wifely duties and responsibilities, she was taught childish pleasures and pastimes. For the first time there were picnics with other children her own age who will not be wives for ten, fifteen, twenty, or twenty years yet. Recently there have been hobbing and skating parties. Gertie Trusty has learned to be a young girl. For her pleasure the Davises have provided a Christmas tree. It will greet her sight when she awakes on Christmas morning. On it will be candies, nuts, girlish knickknacks, a beautiful doll—one that will say "mama" and "papa"—the grass widow who has never yet played with such a doll. Surely, Santa Claus in all his rounds will see no sight such as this.

Minn. State Agricultural Society.

Hamlin, Minn., Dec. 10, 1904.—The annual meeting of the Minnesota State Agricultural Society will be held in St. Paul, Minn., at the capitol, on Tuesday, Wednesday and Thursday, Jan. 10, 11 and 12, 1905, for the election of a president and two vice presidents, to serve for one year, and two managers, to serve for three years, and for the transaction of such other business as may come before the meeting. A program of unusual interest for Tuesday and Wednesday will be announced later through the newspapers. The business session will be on Thursday. —C. N. Cosgrove, President. E. W. Randall, Secretary. There are many forms of nervous debility in men that yield to the use of Carter's Iron Pills. Those who are troubled with nervous weakness, night sweats, etc., should try them.