

Undoubtedly the fire hazard could have been reduced by the sealing-off of all vertical openings; the use of fire-resistant material for lining in lieu of soft board and match-lining; the installation of fireproof doors in all lateral openings; the installation of certain fire-prevention equipment, such as sprinklers; or by ordinary water-supply pipes fitted with hoses, in the event of sprinkler equipment being unobtainable.

It appears from the evidence, and from experience of other countries, the sprinkler system is the most efficient method of dealing with fire when it breaks out. The system operates an automatic call to the fire-station and avoids the danger of a late call.

88. In his opening address counsel for the Crown said that Messrs. J. Ballantyne and Co., Ltd., found it expedient from time to time to make alterations in their buildings. To improve means of communication between departments and give scope for an impressive display, large openings were made in walls, once party walls of the once separate buildings. In most cases these openings were not provided with fire-doors. Had such doors been provided the spread of fire or smoke from department to department, and floor to floor, would have been retarded.

The building, in the basement of which the fire started, was a three-story brick building lined chiefly with matchlining and soft fibre board. There were no fire-escapes and no lifts.

89. The fire was discovered by an employee, a Mr. Stringer. He said that when he first entered the basement to investigate he was able to proceed about half-way along the basement on the south side. He noticed hot, billowing smoke, but no flame, and concluded the seat of the fire was on the north side of the basement. He then returned to the head of the stairs, seized a fire-extinguisher from the archway leading from the carpet department into the soft furnishing, and, after removing his coat and tying a handkerchief over his mouth, he returned to the basement. On this visit to the basement the smoke was appreciably more dense and hot, and he heard a muffled crackling noise coming from well forward on the north side.

The next move by this employee was to enter Goodman's basement by the basement stairs at the western end. While there was smoke in this basement it was not as heavy in volume as in Congreves, and was mostly in the western end and close to the ceiling, but showing evidence of descending. By this time the lino and carpet sections were beginning to fill with smoke, and smoke was drifting into the soft furnishing section.

90. According to the Crown, the first great concentration of smoke was on the first floor of Congreve's building, which was used as a workshop. It was held there for a time because the opening from there to the furnishing showroom was temporarily blocked with a soft fibre board covering. The smoke, however, could rise higher and ascend to the top of the building by means of an open stairway leading from where the fire started to the ground floor, and an open doorway to the adjoining basement of the next building—that is, Goodman's. From Goodman's it could ascend through a lift-well to the third floor, where the top of the lift was unenclosed.

Several theories were put forward as to the way in which the smoke must have travelled.

The Crown suggested there would have been three courses that could have been taken :—

- (1) Following the stairway from the basement in Congreves up the stairway and through the basement door, close to what is called the appro office at the head of the stairway.
- (2) Up the casing round the main electric-supply main, thus by-passing the ground floor. The casing referred to extended from the basement to the first floor, and the smoke would easily flow into the workshop on the first floor.
- (3) It could pass through the cyclone-wire gate between Congreve's and Goodman's basements.