

To illustrate up-to-date store warming, an example is taken of a new building recently erected in Chicago. It is 6 storeys in height, with a frontage of 100 feet and depth of 140 feet, and contains approximately 1,500,000 cubic feet of space. It is heated and ventilated throughout by a forced circulation of warm air, the fans having a capacity of over 125,000 cubic feet per minute. Two steel plate fans are provided, each 9 feet in diameter, and the air is warmed by passing through a pipe heater containing about 20,000 linear feet of 1-inch pipe. Fig. 1 shows a plan of the sub-basement, which contains the fans and heater and the air-distributing ducts. The apparatus is located in a walled pit or room near the centre of the building. Fresh air is taken in above the first storey level and carried downward through a masonry flue at the rear of the building, as shown. This downtake is connected with the cold air room by means of an underground duct of the same construction. The distributing ducts connecting the fans with the uptakes are of masonry and run beneath the basement floor, thus saving valuable space for other purposes. Fig. 2 is the basement floor and shows the uptakes supplying warm air to the building. Three of these, the two adjacent to the elevators and one in the rear, pass upward through the entire building and supply air to each of the different floors through registers, as shown. The two uptakes near the front of the buildings are for warming the vestibule and preventing cold drafts at the entrance doors. The boiler and engine rooms, elevator tanks, etc., are located upon this floor, as shown.

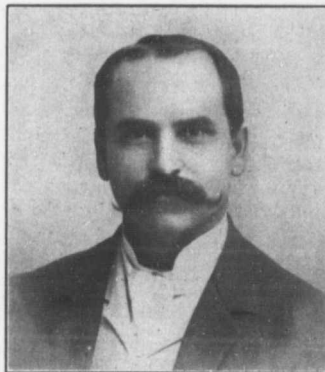
Fig. 3 shows the main floor and illustrates the air distribution to different parts of the room. The vestibule is warmed by hot air introduced through registers at each side. Registers are also provided in the large show windows on either side of the vestibule, but are used only on special occasions.

The method of introducing warm air at each side of the entrance is through grilles in the curved ends of the counters. Under each of these counters is a duct of sheet metal fronted by bars of polished brass, and backed by asbestos to prevent the heat from warping the counters or injuring the stock—Engineering Review.

OBITUARY.

In the death of Mr. Frederick W. Barrett, at Montreal on Sunday, January 26th, the manufacturing and contracting fraternity in Canada loses a very active member. For the past fourteen years the late Mr. Barrett had been connected with Expanded Metal & Fireproofing and Luxfer Prism Companies, Toronto. He was about 51 years of age, having been born in Port Hope, where his father was the late Mr. William Barrett, well remembered in that section.

Mr. Barrett was graduated from Victoria University, and later was admitted as a member of the Upper Canada Law Society. After a brief period of practice at London, Mr. Bar-



THE LATE F. W. BARRETT.

rett joined the management of the Polson Company, being prominent in connection with that firm's shipbuilding enterprise in Owen Sound. Subsequently he entered the legal firm of Messrs. Horn & Barrett, in this city, a combination of forces which did not terminate when Mr. Horn launched the Luxfer Prism Company, and later the Expanded Metal & Fireproofing Company.

Mr. Barrett married the only daughter of Mr. Wightman, druggist, of Owen Sound, by whom he is survived, there being no children.

The funeral was held in Owen Sound on Wednesday, a special train from Toronto conveying many of the office and factory staffs of the two companies, together with a number of family friends and relatives.

The deceased was very widely known throughout the Dominion and

will be greatly missed. He was a member of the National Club, the Canadian Manufacturers' Association, and other influential bodies.

Mr. R. C. Hulme, city engineer and manager of the waterworks department of Belleville, was, Tuesday morning, the victim of a palalytic stroke, which proved fatal on Wednesday last. Deceased was 72 years old, being an Englishman by birth. He was an ex-alderman of the city and ex-lieutenant-colonel of the 15th Regiment, a prominent Mason and a member of the Sons of England. Three sons of the deceased survive him, one in the Yukon, and one daughter. Mrs. Hulme died a short time ago. Deceased had for a number of years been an official of the city, and was highly respected.

CONTRACTOR SCORES VICTORY.

A contractor has just secured a verdict against a company which offered certain buildings for sale at auction, and the auctioneer refused to entertain his bid, but accepted a lower bidder, regarding the higher bid as not made in good faith. The plaintiff being a contractor, claimed damages in the sum of the difference between his bid and the actual value of the property when made over for structural purposes. He was given a verdict of \$1,000 damages. It is claimed that this decision, if maintained in the higher courts, will work a general change of methods of conducting such auctions.—Improvement Bulletin.

A MODEL CITY.

It is the intention of the Grand Trunk Pacific to make a model city of Prince Rupert, the Pacific coast terminus of the great transcontinental road, now being built, and with this end in view two Boston landscape architects are on the way to the site of the new place. Messrs. Brett and Hall, the architects, will spend some six or eight weeks on the ground, and conditions, in order that they may be able to present a report on their return.