

PLUMBING AS A FINE ART

Application of the Craft Takes on New Aspect in the Home.

BATH ROOM ITS PLACE FOR EXHIBITION

Expression of the Graces and Beauty Modern Appliances and Fixtures Limited Only by the Patron's Purse.

Plumbing has undergone an evolution during the past few years. From a luxury it grew to be a necessity, and from a necessity it has passed to an art. A few years ago when a new house was planned, any dark little room was considered good enough for a bath room, and the builder figured that the cheapest material would be ample to answer all requirements.

Original plans have been elaborated on from day to day until now a man can spend any amount that he may desire upon his bath. The limit is only fixed by the capriciousness of his pocket book. It is probably not generally known that there are single bath rooms in the city of Omaha on which \$1,500 or \$1,800 have been spent for the fixtures alone, and there is at least one residence in the city in which about \$16,000 was paid for the plumbing done at the time the building was put up.

Advance During a Decade. It is said by those who are supposed to know that there is no line in which so much advance has been made as in the line of plumbing and home sanitation during the past decade. It was only a few years ago that such things as marble wash stands and solid porcelain bath tubs weighing 80 to 100 pounds were unknown. The tubs in those days were made of iron, unfinished, as were also the other bath room fixtures. They were very prone to rust, and, coming in contact with water almost all the time in a very short while after their installation they presented anything but a pleasing aspect.

Strictly up-to-date bath room furniture now includes at least six principal pieces: namely, the bath tub proper, the setz tub, the foot tub, the lavatory, the closet and the shower bath. All of the pieces with the exception of the closet are in an adjoining apartment with a door between. Light is admitted to the room through stained glass windows made in the Gothic style, and large plate mirrors adorn the walls. The floor is of the finest tile, and is covered with rug of the finest texture. All of the metal is nickel plated and stands out from the wall, termed exposed plumbing. Side lights are fastened to the wall, and when everything is made ready for the first bath in the new home apartment presents a pleasing appearance.

Details of Installation. As described by a plumber, the modern system of plumbing includes a sewer from the bath room direct to the main sewer in the street. The piping runs from the sewer through the roof of the house, and up through the roof of the house. This acts as a ventilator for the sewer. The sewers outside of the house are generally of tiling, and inside are extra heavy iron piping. In large buildings the Durham system is in use, which consists of iron pipes throughout and screw fittings. Each fixture is trapped as close to the fixture as possible, and each trap is vented into a system of galvanized wrought iron pipes. These are connected either with the main vents or run directly through the roof. Water pipes, of course, are connected with the city mains. Everything in the system is connected with the hot water tank, with the exception of the closet. Usually the water supply to each fixture is controlled by stop cocks, and these, as a rule, are located in the cellar.

OVER HUNDRED NEW HOMES This Number Erected or Projected in Omaha Since First of the Year. One hundred and ten new dwellings have been erected or set under way in Omaha since January 1. Twenty-eight cost \$1,000 or less; fifty-seven, \$1,000 to \$2,000; and twenty-five, more than \$2,000. So far during April building operations have been authorized costing \$7,728, whereas the whole month last year brought but \$8,940 worth. For last month the gain in local building over last year was 67 per cent, greater in proportion than any other city in the country except five.

Permits have been issued to W. T. Graham for three houses, two to cost \$2,000 each, at 256 North Twenty-fourth street and 2011 Pinckney, and one at 2525 Blondo. John Safarik has obtained a permit for a \$1,500 house at Twenty-seventh and Capitol avenue.

HEATING MODERN HOUSES

Steam, Hot Water and Hot Air to Combat the Cold.

INGENUITY CONDUCE TO COMFORT

Old Methods of Warming Homes and Buildings and Supplying Fresh Air Have Nearly Been Supplanted.

Modern heating is done by three principal systems and ventilating by two. In heating, steam is generally conceded to be the leading means for conveying the heat of coal into the rooms of buildings, and there spreading it to gain an even temperature. The hot water system is a close second to steam, and the hot air system brings up the rear of the procession. In ventilating, generally speaking, the fan system takes the lead and the indirect radiation system follows. Sometimes the two systems are combined, which is said to be the protection of ventilation, and sometimes the indirect system is modified and called direct-indirect. The same is true of the heating systems.

Features of Steam Installation. In a properly arranged apparatus the boiler is of ample capacity to supply radiating surface with steam for ten or twelve consecutive hours without attention, and is placed in the cellar or basement. There are two principal systems into which steam heating is divided, the two-pipe system and the one-pipe system. The most frequently used is the two-pipe system, in which one or more steam pipes are taken vertically from the top of the boiler, and after having attained the proper height, are carried horizontally in the various directions required to supply their lateral branches and the vertical risers to the radiators. A true one-pipe system has no return pipe and all water of condensation is returned to the boiler through the steam pipe, against the course of the steam.

Hot Water and Hot Air. A hot water heating apparatus consists of a heater or hot water boiler, the piping, the radiator and an expansion tank. The pipes consist of flow and return pipes, divided into mains, branches and risers. Water is at its greatest density at 81 degrees Fahrenheit, and any excess of heat causes it to expand. Consequently a pipe at 300 degrees weighs less than at 140 degrees, and water at a higher temperature is introduced at the bottom of a vessel containing water at the lower temperature, the hot water will ascend to the top of the vessel. If the vessel be arranged in the form of a pipe connected at one end with the bottom of the boiler, and at the other with the top of the boiler, so that a circuit is formed, and the water fills the boiler and pipes there will be a continual circulation, and this is the underlying principle of hot water heating. The heat is distributed by the water constantly striving to remain in the radiator, which is disturbed by the heat under the boiler. The principle of hot air heating is too well known to need description. The heat is distributed by the cold air which comes in contact with the surface of the furnace being heated and thereupon rising through the pipes arranged to carry it into the apartments to be warmed.

Ventilating Systems. Ventilation is nearly akin to heating. In the indirect system the cold air is brought in from the outside through ducts usually placed beneath the radiator. As the cold air flows in the temperature of the apartment falls, and an automatic device connected with the shutter which regulates the aperture closes, and as the temperature of the apartment rises it opens thus keeping the temperature at any given point desired. The work of the direct system has already been explained. The fan system is used principally in large buildings, and fans are now made of almost all sizes, some of them large enough to draw a team of horses might be driven through them. These fans are of two styles, one to draw the fresh air into the apartment and the other to blow vitiated air out. They are run by electric motors and by small gasoline engines directly attached.

Stoves Belong to Past Age. The old system of heating with stoves has seen its day, and like all old veterans who have served their purpose, and served it well, when no better were in sight, are passing. In a few more years, it is believed by those who are interested in the matter, the stove will be entirely superseded by other methods. However, there has as yet been no method devised which equals the householder for cheapness of operation, but the American people do not demand price alone, they desire ease of operation and comfort as well. In twenty-five years the fireless will be the grate in the parlor or lounging room of the family, which will be retained for its appearance of comfort. Steam pipes, however artistically elaborated upon, will never be made to yield that feeling of warmth which the fire within the grate gives off, no matter if the room may be a few degrees cooler than with modern apparatus.

PLATE GLASS FOR THE HOME

One of the Newer Moves in the Way of Making Residences More Attractive.

F. W. Judson, secretary and manager of the Midland Glass and Paint company, in speaking of his company's business, says: "We have been in business for about four years, and we estimate the amount of glass and paint being sold from Omaha at the present time is about five times greater than four years ago. Very little glass or paint is now shipped into this territory from eastern points, as Kansas City, Omaha and Minneapolis jobbers practically supply goods of this character for the western country.

EVIDENCE IN PLAIN SIGHT Drives About the City Disclose the Prosperity Omaha is Now Enjoying. In talking with John Grant, vice president and general manager of the Bitulithite company, he makes the statement that from driving around the city several hours each day he realizes probably as much as any one else what an unusually large number of residences, costing from \$3,000 to \$5,000, are being erected. They are not confined to any particular section, but are going up in all parts of the city. These building operations affect his business materially, as they have to have sidewalks, and he says that in the past month he has taken orders for between 20,000 and 40,000 feet of cement sidewalks, which are now being constructed. He says that the price of cement is away down, being just a trifle higher than brick.

Waterloo Work at Waterloo Enter Depot and Scatter Tickets, but Get Little or Nothing of Value. WATERLOO, Neb., April 16 (Special).—Burglars entered the depot at this place last night, but so far as could be discovered this morning nothing was secured of value. The tickets were scattered over the floor. Entrance was effected by breaking a window light out and raising the window.

Involutary Bankruptcy. The creditors of Leonard D. Baldwin and Herbert D. Baldwin, doing business as partners under the name of Baldwin Bros., hardware dealers at Plainview, have filed a petition in the United States district court, asking that they be declared bankrupt. The petitioning creditors are the Marion Stove Works company, Marion, Ind.; Excelsior Stove Works, Quincy, Ill.; Majestic Manufacturing Company of St. Louis; Ohio Whip company of Osborn, O. The total amount of their claims aggregates \$227,750. The petition states that Baldwin Bros. committed the act of bankruptcy in December last and at times since then by disposing of their real estate and stock of merchandise to other parties without regard to the rights of the petitioners.

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Western Electrical Company 1212 FARNAM STREET, OMAHA. Complete Installations of ELECTRIC LIGHT PLANTS, DYNAMOS, ENGINES, BOILER WIRING, INTER-COMMUNICATING TELEPHONE SYSTEM, ETC. Following are a few of our Omaha Contracts: Dynamos, Engines, Etc.: The Her Grand Hotel, The Bemis Omaha Bag Co., The Willow Springs Distillery, The Bennett Company, The Omaha Box Building Company, The Omaha High School, The Kimball Laundry. Electric Light Wiring: The Omaha Club, The Sacred Heart Church, The Omaha Public Library, The Douglas County Hospital, The Omaha High School, The F. P. Kirkendall Shoe Co., The Barvard Apartments, The Omaha Daily News. The Residences of Hon. C. F. Manderson, Hon. Frank Murphy, Hon. C. W. Lyman, Hon. George A. Joslyn. Interior & Office Private Phones: U. S. Supply Company, Boston Store, Omaha News Company, Kappoo, Bartlett—Printers, Haywood Bros. Shoe Company, J. J. Deright & Company. SPECIAL ATTENTION GIVEN TO Electric Wiring in Residences, Warehouses, Retail and Wholesale Stores, Factories, Etc. QUICK REPAIRS TO Electric Bells, Gas Lighting and House Work. Western Electrical Company G. W. JOHNSTON, President. 1212 FARNAM STREET. TELEPHONE 456.

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FEW FIREPROOF BUILDINGS (Continued from Page Twenty-one.) nearly uniform, and this new form of construction will enter largely into building specifications in the future. An excellent type of the modern methods of fireproof construction is in the new building South Omaha public library. The contract calls for an absolutely fireproof structure, and it is being built under that specification, barring only the doors and windows, which of necessity must have more or less wood about them. The Omaha Auditorium will also be a practically fireproof structure, and will be fitted with all the latest materials entering into fireproof construction. Even the establishment of tanks on the tops of mercantile houses operates to very materially reduce the insurance rates, and while these tanks are regarded as architectural monstrosities, they are very effective adjuncts to fire protection, and are so regarded by the insurance underwriters. MATERIAL IS MUCH CHEAPER J. A. Sunderland Points Out One of the Advantages of the Present Season. J. A. Sunderland of Sunderland Bros. company, who deal extensively in building necessities and supplies, in speaking of the outlook for the coming season, says: "That the present activity in building is the result of necessity and not of speculation is shown in the fact that almost all the down town building is for tenants already under contract, or for institutions that require new and enlarged quarters for their own use. The building of cottages and more pretentious residences is largely for the occupancy of owners, and notwithstanding the great number of new houses now in excess of the supply. Building material dealers have been in position to note more accurately than many citizens the constant building that has been going on since exposition year. Vacant lots have been occupied, better buildings have come

IT LEADS! There are three convincing reasons why judges of good whiskey always demand QUAKER MAID RYE. ITS MELLOWNESS! ITS PURITY! ITS BOQUET! At all leading bars, cafes and drug stores. S. HERSCHE & COMPANY, Kansas City, Mo.