Plumbing

PLUMBING A TOWN HOUSE.

THE Plumbers' Trade Journal summarizes the plumbing work installed in three New York City residences which afford good types of recent workmanship.

The galvanized cellar sinks are 18 x 36, with open strainers and overflow set on iron pipe frames and supplied with hot and cold water through ½-inch galvanized branches, ½-inch finished brass compression hose bibbs and waste through 2-inch lead trap-waste and 1½ inch vent.

Kitchen sinks are 24 x 42 imperial porcelain roll rim, supplied with hot and cold water through ¾-inch galvanized branches behind the tile and have nickelplated ¾-inch Fuller bibbs and waste through 2-inch nickelplated plug and strainer, 2-inch nickelplated brass pipe and a 2-inch trap to floor.

The washtubs are supplied with hot and cold water through ¾-inch galvanized branches run on wall above tubs, with ⅝-inch long shank Fuller wash tray cock, and waste through 2-inch lead trap and waste with 1½-inch vent.

The servants' closets are front outlet washout combination, seat attachments, nickelplated hinges, oak seat and cover, brass floor plates, nickelplated bolts and washers, slate platform, width of space with back and sides 16 inches high. The cistern is an 8-gallon copper-lined plain siphon, supplied through ½-inch galvanized pipe and 1¼-inch lead flush pipe. The basement and fifth floor basins are 16-inch round wing basins, with Italian marble countersunk slabs 12 x ⅞-inch backs, 6-inch aprons on fifth floor, supplied with hot and cold water through ½-inch galvanized and ½-inch AA branches, No. 1 nickelplated compression basin cocks and waste through nickelplated plugs and couplings, 1½-inch lead trap waste, and 1½-inch vent.

The ground floor basins are porcelain, oval, and secured to 1¼-inch Italian marble (countersunk) with 12 x ⅞ inch backs and ends. Aprons are 6 x ⅞ inch. These basins are supplied with hot and cold water through ½-inch AA lead and ⅜ nickelplated branches from floor up, with Fuller basin cocks, waste through unique and 1½-inch half S nickelplated trap. All exposed pipes are nickelplated.

The pantry sinks are imperial porcelain, 20 x 30 x 9 inches, with Italian marble back, 16 inches high, and supplied with hot and cold water through ½-inch AA lead branches and are nickelplated Fuller pantry cocks and cold water vent.

The basins on second floor are supplied with hot and cold water through ½-inch N. P. brass angle branches and nickelplated unique waste, and 1½-inch brass trap to wall.

The bathtubs on second floor are Greco-Roman Imperial baths, with nickelplated unique waste and bell supplies. Waste through a 2-inch trap. Bathtubs on third and fourth floors are Perfecto baths.

Basins.—Third and fourth floors are porcelain, 15 x 19, oval, secured to slab of Italian marble, 1¼-inch, which is countersunk, the backs being 12 x ⅞-inch, having 6 x ⅞-inch aprons, all supplied with hot and cold water through ½-inch AA lead and ⅜-inch nickelplated branches from floor up, with nickelplated basin cocks and waste through ½-inch half S nickel trap to wall. These basins have unique waste and basin cocks, same as on second floor. Behind the second and third floor bathtubs are connections for shower combinations.

Fifth floor water closets are the F. O. washout combinations, brass floor plates. The cistern is an 8-gallon copper-lined siphon, with a 1¼-inch lead pipe and ½-inch galvanized supply. Stop sink on fifth floor is the Marlborough No. 33 siphon jet stop sinks, with tank and lead flush pipes, with ¾-inch galvanized supply pipes, with extensive cocks behind plaster.

The Croton supply from the street is inside the cellar wall, and from the main stopcock there runs a ½-inch galvanized supply on the cellar ceiling, with ½-inch branches to cellar sinks and ¼-inch branches to hot water boilers. There also runs a ¼-inch branch in cellar to steam boilers.

Just inside the main stopcock there runs to supply pump a 1½-inch galvanized pipe. On the main house side of pump connection is a check valve. The pipe to tank is 1½-inch galvanized iron, with ½-inch telltale return to cellar sink. From the tank on the roof to the hot water boilers in the cellar there runs 1¼-inch galvanized pipe to supply the same. There are separate lines for cold water from roof tank, and for hot water from boilers in cellar to needle baths in second story main bathrooms, with 1¼-inch valves to control the same.

Connecting with street supply is a 1-inch galvanized pipe, which runs alongside of each line of fixtures, having dividing stopcocks on each floor, so that street or tank water can be supplied at will. The hot water risers from boiler are 1-inch galvanized pipe having ¾-inch circulation pipes back to bottom of boilers. Three-quarter-inch branches from the hot and cold water lines supply each set of fixtures on the different floors. These have nickelplated shut-off valves to shut off each set of fixtures. All rising lines have valves at bottom. Each line of pipe is controlled by 1-inch brass globe valve with ⅜-inch drip pipes discharging through sediment waste from boiler to kitchen sink. The mains are hung on the ceiling and secured by galvanized iron hangers. For the refrigerators in the basement and butler's pantry there runs a 1½-inch galvanized safe waste, which discharges over the cellar sink through a flap valve.

A RESIDENCE AT ATLANTA, GA.

THE engravings shown on page 6 present a residence which has recently been erected for Alexander Smith, Esq., at Atlanta, Ga.

The building is treated with Colonial detail and a classic frieze as the cornice. It is constructed of gray brick veneer with white terra cotta trim and cornice. The roof is covered with slate. Dimensions: Front, 44 ft.; side 80 ft., exclusive of piazza. Height of ceilings: Cellar, 7 ft.; first story, 10 ft.; second, 9 ft.; third, 8 ft. 6 in.

The principal rooms on the first floor are trimmed with oak. The hall is treated in the form of a reception-room, and has a beamed ceiling, a paneled wainscoting, and a large open fireplace, furnished with a tiled hearth and facings, and a mantel of Colonial style with columns. The staircase is of an unusual plan, for it is constructed with two short flights of steps from opposite directions to a landing, from which the stairs rise to the second floor. The drawing-room is treated in the Colonial style, and has a fireplace with tiled facings and a hearth of white enamel tile, and a mantel of Colonial style with columns and mirror. The library is furnished with bookcases built in, and an open fireplace. The dining-room is finished with dark Flemish oak, and has a paneled wainscoting, ceiling beams, an alcove for the buffet, and an open fireplace provided with tiled facings and a hearth, and a mantel. The butler's pantry and storeroom are well fitted up with the best modern convenience. This house has the usual feature of a modern Southern home, in having a passage between the butler's pantry and the kitchen, which is in itself practically a detached building. The kitchen is provided with a dresser, sink, range, and laundry tubs complete. There is also on this floor a bedroom and bathroom attached, which is furnished with an open fireplace, tiled wainscotings and floor, porcelain fixtures, and exposed plumbing.

The second floor is treated with white enamel paint, and contains five bedrooms, dressing-room, linen closets, ample, well fitted closets, and a bathroom, the latter being provided with an open fireplace, porcelain fixtures, and exposed nickelplated plumbing. The floor is paved with unglazed tile, while the walls have a glazed tiled wainscoting.

The servants' room and trunk room are located on the third floor. A cemented cellar contains a furnace, fuel bins, etc. Cost $12,000 complete. Messrs. Bleckley & Tyler, architects, English American Building, Atlanta, Ga.

A GARDENER'S COTTAGE AT PINE ORCHARD, CONN.

ON page 12 is an illustration for a gardener's cottage which has been erected for A. M. Young, Esq., at Pine Orchard, Conn.

The design is an attractive one of the gambreled roof order. The underpinning and first story are built of fieldstone laid up at random. The columns of piazza are of similar stone. The gables are covered with shingles and stained a deep red. The roof is also covered with shingles and stained a dull green. The trimmings are painted cream white. Dimensions: Front, 28 ft.; side, 33 ft., exclusive of porch. Height of ceilings: Cellar, 7 ft.; first story, 9 ft.; second, 8 ft.

The interior throughout is trimmed with North Carolina pine. The living-room occupies the entire front of the house, and contains an open fireplace built of fieldstones and a staircase of ornamental character. The dining-room is conveniently heated, and the kitchen is well placed. The pantries are well fitted up.

The second story contains four bedrooms, large closets, and a bathroom; the latter is wainscoted and furnished with porcelain fixtures and exposed nickelplated plumbing. A cemented cellar contains a furnace and fuel rooms. Messrs. Griggs & Hunt, architects, Waterbury, Conn., and New York City.

EVERY ornament has a use in being ornamental. That is quite as essential as the utmost utility. So do not throw out beautiful things because they are not useful. Beauty helps the house all the time.

New Building Patents

The following list of New Patents relating to Building and Sanitary Science is prepared expressly for the SCIENTIFIC AMERICAN BUILDING MONTHLY by MUNN & Co., Solicitors of American and foreign Patents.

A PRINTED COPY of the specification and drawing of any patent in this list, or any patent in print issued since 1863, will be furnished from this office for 10 cents, if exact date or number is furnished. Remit to MUNN & Co., 361 Broadway, New York.

BRICK, STONE, AND TILE.

TILING. T. F. Furness, Philadelphia, Pa. May 5, Design 33,313
FLOOR TILE. A. Plant, Keyport, N. J. May 19..... 728,290
BUILDING BRICK. E. H. Vordtriede, St. Louis, Mo. May 26 729,023
TILE FLOORING. C. P. Capen, St. Louis, Mo. May 26. 729,128

CARPENTRY.

WINDOW. P. J. Hasselquist, Rhinelander, Wis. May 5 727,135
WINDOW. J. Horsfield, Chicago, Ill. May 5..... 727,366
WINDOW Sash Joint. C. Mundel, Baltimore, Md. May 5 727,406
WINDOW. Charles Bickel, Newark, N. J. May 12.... 727,882
WEATHER STRIP. A. J. Kitson, Ann Arbor, Mich. May 19 728,244
WEATHER STRIP. Bouden and Robb, Brooklyn, N. Y. May 19 728,686
REVOLVING WINDOW STRIP. H. E. Essig, Canton, Ohio. May 19 728,690
WINDOW CORNER POST. P. Ebner, Columbus, Ohio. May 26 728,885

CONSTRUCTION.

SIDEHILL BUILDING CONSTRUCTION. G. C. Scott, Columbus, Ohio. May 5 726,998
CONSTRUCTION OF ARCHES. J. A. Drake, Halifax, England. May 5 727,110
CONSTRUCTION OF WALLS AND PARTITIONS FOR BUILDINGS OR OTHER STRUCTURES. W. F. Walker, Charleston, W. Va. May 5 727,234
CONSTRUCTION OF BUILDINGS. G. Y. Bonus, Chicago, Ill. May 12 727,579
LOCK JOINT FOR COLUMNS. W. L. Taylor, Elmira, N. Y. May 12 727,862
EXPANDED METAL STRUCTURE. H. E. White, Niles, Ohio. May 19 728,345
SEMIPERMANENT PORTABLE BUILDING. J. Kulhanek, Prague, Austria. May 19 728,471
PROVISIONAL OR PERMANENT WALL. J. Kulhanek, Prague, Austria. May 19 728,472

ELEVATORS.

CONTROLLING MECHANISM FOR ELEVATORS. T. W. Heermans, Chicago, Ill. May 19..... 728,228
ELEVATOR. F. B. Rae, Chicago, Ill. May 19. 728,292
ELEVATOR APPARATUS. I. H. Venn, Yonkers, N. Y. May 19 728,338
ELEVATOR. A. C. Smith. New York, N. Y. May 26 .....729,433, 729,434

FIREPROOFING AND FIRE EXTINGUISHMENT.

CONSTRUCTION OF FIREPROOF FLOORS. T. A. Naylor, Baltimore, Md. May 5 727,187
FIREPROOF BUILDING CONSTRUCTION. E. P. S. Wright, Shorthills, N. J. May 5 727,250
FIREPROOF CONSTRUCTION. J. A. Holmboe, Louisville, Ky. May 5 727,364
AUTOMATIC FIRE EXTINGUISHER. R. W. Newton, Providence, R. I. May 19 728,280
FIREPROOF WOOD AND THE ART OF MAKING SAME. J. L. Ferrell, Philadelphia, Pa. May 19 728,452
FIREPROOF FLOOR CONSTRUCTION. C. F. Buente, Allegheny, Pa. May 26 728,857
CEILING OR WALL CONSTRUCTION FOR FIREPROOF BUILDINGS. W. Horn, Chicago, Ill. May 26.... 728,919
FIREPROOF BUILDING STRUCTURE. Ellinger and Kopczynski, Baltimore, Md. May 26..... 729,299
FIREPROOF WALL OR BUILDING. G. W. Pickin, Eau Claire, Wis. May 26 729,408

HARDWARE.

SASH FASTENER. H. Van Wie, San Francisco, Cal. May 5 727,036
AUTOMATIC DOOR CLOSING MECHANISM. W. A. Cross, Chicago, Ill. May 5 727,097
SASH FASTENER. C. H. Hook, Baltimore, Md. May 12 727,950
SASH FASTENER. F. Keilwerth, Cincinnati, Ohio. May 12 727,968
SASH LOCK. J. Mac Vane, Riverside, R. I. May 12.. 727,984
COMBINED LOCK AND LATCH. M. C. Patrick, Seattle, Wash. May 19 728,755
HINGE. B. Peterson, South Chicago, Ill. May 26.... 729,406

HEATING AND VENTILATION.

VENTILATOR. Foos and Muir, Washington, D. C. May 19 728,387
WINDOW VENTILATOR. T. T. Doll, Chicago, Ill. May 19 728,447
CLOSET VENTILATION. J. J. Donovan, Peekskill, N. Y. May 19 728,448

MISCELLANEOUS.

METALLIC ROOFING SHINGLE. H. E. Moomaw, Chattanooga, Tenn. May 5 727,179
MANTEL. J. E. Holbein, Evans City, Pa. May 12.... 728,169
PAINT OR PROTECTIVE COMPOSITION. E. G. Bertrand, Paris, France. May 26 729,258

PLUMBING.

WATER CLOSET FLUSHING APPARATUS. A. Kulhanek, Prague, Austria. May 19 728,470
WATER CLOSET. F. Schuh, Albany, N. Y. May 19.... 728,624
WATER CLOSET AND APPARATUS CONNECTION. C. F. Ryan, Chicago, Ill. May 26 728,985

TOOLS.

PLASTERERS' CORNER BEAD. L. Schuller, Chicago, Ill. May 5 727,463
PLUMB OR LEVEL. C. C. Hummel, Espy, Pa. May 26.. 729,347