

**CONCERNING PLUMBING.**

Something That Is by Many Regarded as a Necessary Evil.

By a great many people plumbing work is regarded as a necessary evil. As to its being necessary for comfortable and economical living there can be no doubt. As to its being an evil, that depends. There is no reason why all plumbing work should not be safe from a sanitary standpoint. There is no reason why there should be vexatious plumbing bills to disturb one's peace of mind and deplete his pocketbook. Plumbing work may be laid out and executed in a way to be entirely safe and economical of maintenance.

There are a few principles which one needs to consider in order to bring about the results above outlined. All plumbing work is essentially a system of water supply drainage from the house, and the attachments to the drains are the fixtures, such as kitchen sinks, water closets, wash stands, bath tubs and laundry tubs. All of these fixtures have connection with public or private water supply or both.

The drainage from the fixtures and their connection therewith is the part of the plumbing work requiring the most skilled attention. The main drain outside of the house has direct connection with a vault or sewer. It is important that the inside connection with this drain be such as will prevent the passage of the contaminated air of the sewer or vault into the house. This is done in two ways. First, the fixtures have a trapped or water sealed connection with the drain. Second, the air in the drain has an exit above the top of the house. This is done by continuing the drain above the roof. This is what is known as drain ventilation. All drains with all fixtures should be ventilated in this way.

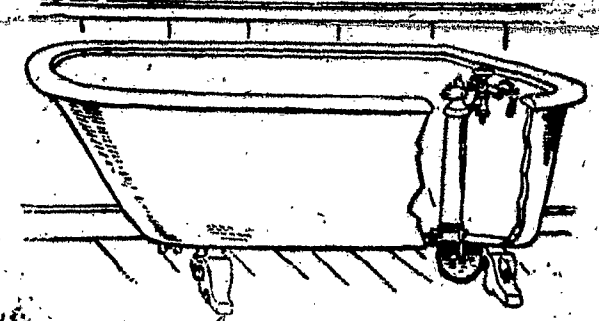
The "S" trap referred to gets its name from its form, which is illustrated by the sketch. The drain water comes down through the trap from above into the lower part of the bend and then upwards and again downwards and into the drain. Thus there is a certain amount of water always in this trap. This water is called the seal. The depth of the seal is dependent upon the depth of the bend in the trap. It will be seen that the air would have to pass through the water to get into the house.

There are many conditions under which the trap would fail to act. The water may be siphoned out, may evaporate, or it may become contaminated from long connection with the air in the drain. The ventilation of the drain and the ventilation of the trap reduce this risk to a minimum. There are hundreds of different kinds of traps, but they are all constructed on the same principle. They are all largely dependent upon the water seal for protection to the inside of the house. Abundant flushing is highly important as a precautionary measure. Flushing means a discharge of large quantities of water through the traps and drains. The frequent use of plumbing apparatus contributes to its safety from a sanitary standpoint.

Sketch No. 2 is of a water closet of a wash-out pattern. There are hundreds of makes of water closets constructed in this way. The body of the closet is of porcelain. The upper part is a large bowl, having an "S" trap connection with the soil pipe. The seat is of wood and there is a flushing tank above. This has a 1/2 inch connection with the bowl. When the closet is used the chain handle is pulled and the bowl is flushed with a large quantity of water. This is the simplest and best type of water closet now in use. It will be noticed that the closet proper is entirely exposed to view.

Sketch No. 3 shows a modern washstand. It is carried on brackets made of marble or iron, the top and back are marble, and the bowl of porcelain ware. It has a standing overflow at the back and inside of the bowl, this bowl having a straight back rather than a true semi-spherical form, as is common. The ordinary waste, which is in the back of the bowl, becomes foul from rancid soap which accumulates therein from time to time. The standing overflow mentioned here can be lifted out at any time and washed. It also acts as a waste when one desires to drain the water from the bowl. By merely turning the little knob at the top an opening is formed. An objection to the valve and chain

waste is that the chain gets foul and is never perfectly clean. After it has been used once it is foul for use next time. It will be observed that, in this instance the entire under part of the washstand is left open.



The bath tub shown in sketch No. 4 is of iron, porcelain lined. They are made of polished copper, solid porcelain and cast iron unpainted. The copper tub is the cheapest; the porcelain the best. The iron, porcelain lined, is a very agreeable compromise. It has the standing overflow, same as that described for washstands, and this tub is not cased at sides or ends any more than is the washstand and water closet described.

The kitchen sinks have been described before. The laundry fittings will be considered at some other time. LOUIS H. GIBSON.

Cologne sets consist of three large cut glass bottles with prismatic stoppers. These are set in brass with enamel incrustations, and so arranged that they can be carried about by a handle.

**Ensign Jackson's Good Fortune.**  
Congress has done a very creditable act in authorizing the president to appoint Richard H. Jackson, of Alabama, an ensign in the navy. Young Jackson, having finished his studies in the naval school, was sent on a two years' cruise, at the end of which a part of the class, under the law, was retired and the others made ensigns. Jackson fell among those retired. But when he was on his cruise he distinguished himself so greatly that this special law has been passed to retain him in the navy.

It was at the great storm at Apia, Samoa. At a critical moment, when the Trenton was about to drift on a reef, he led the men aloft, where their bodies had the effect of a sail, and this saved the ship. Admiral Kimberly highly complimented Mr. Jackson on his bravery in time of such peril, and in a report to Secretary Tracy says that he not only saved the Trenton's crew, but also that of the Vandalia, who would all have been lost had not the Trenton drifted alongside and rescued her men.

Mr. Jackson is only 23 years old, and was appointed to the Naval Academy by Gen. Wheeler, of Alabama, graduating in 1887.—Raleigh News and Observer.

**Contesting a Live Man's Will.**  
In the probate court at Cincinnati the case of Mrs. Josephine Fee against J. J. Hopple was heard by Judge Goebel. It is a case in which the daughter sues her father to prevent the carrying out of his will, instead of waiting until after his death to contest it, on the ground that he has, by undue influence, disinherited her not only, but been led to aver that she was not his daughter, by reason of some alleged flaw in his marriage to her mother, his first wife.

That good woman died years ago, and it is about twenty years since Mr. Hopple married a Miss Boone, who had been his nurse through an illness. Mrs. Boone-Hopple did not like her stepdaughter Josephine, and it is alleged that she induced Hopple to destroy a will in which he had provided for Josephine as his "beloved daughter," and to make the new will, leaving the latter practically without share in his \$50,000 estate. It is a case interesting and unique.—Cor. Philadelphia Record.

**Hearst's Rich Gold Mine.**  
The Homestake mine, in the Black Hills, of which Senator Hearst is a principal owner, is the richest gold mine in the world," said H. C. Rorapangh, of Deadwood, S. D., at the Metropolitan. "It is the biggest in a group of mines in the immediate vicinity of Deadwood. The company has 3,000 men at work in the mines, mills and woods. For fourteen years they have never missed a dividend, and every month take out from \$150,000 to \$200,000 in gold. There are 1,200 stamps in operation. The vein of the Homestake is 300 feet wide by about two miles in length, and there is ore enough in sight to run all the mills for the next twenty years."—Washington Post.

**Hard to Swallow.**  
A death from a remarkable cause is reported from Coosa county, Ala. Thomas Waits, a young man of 22, living about seven miles from Verbena, contracted in his youth the habit of eating dirt and red gravel rock. As he grew to manhood the abnormal appetite grew upon him. For some months previous to his death he worked on a gravel train on the South and North railroad. He could not procure such rocks as he had been in the habit of eating, and finally would eat hard flint gravel or any other kind convenient. As he could not masticate his strange food, he eventually took sick and returned home to die.—New Orleans Times-Democrat.

**Blipped on a Chartered Locomotive.**  
Expense did not keep William C. Trudeau and Miss Beatrice Harrig from eloping to Jeffersonville Tuesday night and becoming man and wife. The couple intended to cross on the ferry, but reached the wharf some time after the last boat had gone. Delays were dangerous in the eyes of the prospective groom, and, hurrying with the young lady to Fourteenth and Main streets, after much parleying an engine was chartered to carry them over. They reached Jeffersonville about 4 o'clock, and meeting a couple of policemen asked to be shown the residence of County Clerk Stealey. Arousing him, a license was procured, and half an hour later the same couple were standing in the dimly lighted parlor of Magistrate Keigwin, who, robed in a dressing gown, made the couple one.—Louisville Courier-Journal.

**Legally Dead.**  
The will of Micah W. Norton, the convicted murderer, sentenced to state prison for life, was filed in the probate court of Somerset county recently. He wills to his four sons a farm in Moscow containing 165 acres, two farms in Concord, a farm in New Vineyard, with timber lot and pasture adjoining; to his son Albert E. Norton he gives a farm in Solon, and to his son Carleton W. Norton a note of \$200 and interest; to his son Sumner S. Norton he gives the remainder of his property, providing the son will provide for his support when requested. He desires his five sons to share equally in the estate of his wife, Eliza. His son Sumner is appointed executor. Norton leaves an estate of \$20,000 and makes his will, as when he goes to prison he is legally dead.—Augusta (Me.) Cor. Boston Herald.

**A Green Skinned Man.**  
The strange case of a man flayed alive and afterward passing through an ordeal of unparalleled experiences has been brought to public attention at Indianapolis by the recovery of Wesley Kellar, a woodworker, who fell into a steam vat at the Indianapolis Veneer works two months ago. His flesh was cooked, and the doctors decided that there was only one chance in a thousand of having his life saved by removing the skin from his body. After two days this was done. He was peeled from head to foot. Frog's skin was grafted on as the dead skin was removed. The operation has proved a complete success, and the man has recovered sufficiently to be able to return to work.—Cor. Chicago Tribune.

**Latest Form of Rubber Pavement.**  
The municipal authorities of Brussels have decided to experiment on the new compound "caoutchouc macadam." A portion of one of the principal boulevards of the city is being paved with this material. The compound consists of a mixture of India rubber and different kinds of stones, ground up together, and converted into a sort of cement by means of heat. The material is stated to be hard, elastic and durable, and to be unchanged by either heat or cold. It is anticipated that it will prove extremely well adapted for running tracks and lawn tennis courts.—New York Commercial Advertiser.

The present economical condition of France is considered unusually favorable by her statesmen. The harvest this year was about 120,000,000 hectoliters (100 quarts) of grain, the largest of the last decade. The export of manufactures has increased as well as the import of raw materials. The railway profits have also increased.

The losses in Connecticut by the pole sweat of tobacco account of the unusual rains in September will not be so great as was at first feared, yet many thousands of dollars will be sacrificed on account of the injury done by the pole sweat, followed by decay. Every year the hard working producers suffer more or less from the same cause.

There were sold in New York last year 1,500,000 barrels of potatoes. At 400 potatoes to the barrel, which is a moderate estimate, that amounts to 600,000,000 of potatoes eaten in New York. They come from everywhere; from Bermuda and the Gulf states to the far north and west. There were imported 50,000 barrels last year.

The banquet of the international vegetarian congress in London recently consisted of porridge, stewed and fresh fruit, eggs and lentil cutlets with tomato sauce, mushroom patties and savory sandwiches. After this official breakfast the congress held a conference advocating their ideas of food.

What is claimed to be the largest load of logs ever hauled in Santa Cruz county, Cal., was brought into Montezuma a few days ago. It was drawn by five yoke of oxen, and included twenty-five logs that scaled 50,486 feet of lumber.

**New Yorkers Are Afraid of Wires.**  
A new practical application of electricity is an apparatus to light cigars. The machine is connected by a wire with one of the ordinary light currents, and by touching a button a small but bright electric spark is produced, at which one can ignite the ordinary rod saturated with alcohol. One of these apparatus had just been placed upon the cigar counter of a big downtown restaurant. Its use was somewhat unfamiliar to the habitués of the place, and I was told to watch them. As various gentlemen finished their lunch they usually approached the cigar stand to light their weeds.

In several cases they hesitated to apply the rod to the electric spark even after the process was explained to them, although the handle of the rod was evidently composed of hard rubber or some other insulated material. Finally an elderly gentleman approached the machine, and on being told how it worked insisted on holding the point of the rod about two inches away from the light, giving as an explanation his disinclination to "monkey with electric currents." A bystander had finally to light it for him. This goes to show that the public is somewhat afraid of live wires.—New York Star.

**The Heedlessness of City Folk.**  
The heedlessness of Park row pedestrians to matters of passing interest was probably never more forcibly illustrated than about 7:30 o'clock the other evening, when a big plate glass window was broken right before the eyes of at least fifty persons, and only one observed the act. A diminutive Park row hoodlum was swinging on the chain that guards a hatchway in the basement of The Tribune building at that hour. Suddenly one end of the chain broke and struck the plate window of the mineral water store and smashed it. The hoodlum was paralyzed for a second at the damage he had done, but he did not linger to make any inquiries. He recovered quickly, and flew across the square at a Salvator gait. The observer was rushing for a bridge train, and did not have any time to take any action. The proprietor and police will be probably trying to unravel the mystery of how that window was broken until they read this.—New York Sun.

**Electric Census Taking.**  
The English electrical papers in commenting on the great success achieved in Washington by the electrical census tabulating machine, which enabled the authorities to deal with the large returns with such admirable expedition and absence of confusion, express the hope that a similar arrangement will be adopted in the approaching census in England. The staff set aside for the purpose at Washington was able by means of the electrical machines to count the entire population of the United States in ten days of seven working hours each. The population of the civilized world, putting it at 650,000,000, could thus be counted by the same staff in 100 days, and the entire population of the earth, which, including Asiatics and savages, is estimated at 1,800,000,000, could be similarly determined in less than 200 days.

**The Hunter's Moon.**  
The full moon next following the harvest moon is called the hunter's moon. Our satellite is still at a point in the ecliptic near enough to the sign Aries for her to make a small angle with the eastern horizon when rising, though larger than at the time of the harvest moon. As the harvest moon was supposed in the days of old to be a special interposition of Providence to help the husbandmen in gathering in the fruits of the earth, so the hunter's moon was considered as a special boon to the huntsmen in the pursuit of their favorite sport. The October moon rises for three consecutive evenings after the full moon with an average difference of thirty-seven minutes.—Lewiston Journal.

Policeman Patrick Stark, of the Third precinct, New York city, found the champion scrupulous man while acting as a census enumerator. He was J. Grinker, of No. 78 East Broadway, who refused to give any information, as in his opinion "it was a reflection upon the United States government."

Congress several years ago enacted a law placing an import duty of \$10 per pound upon smoking opium brought into this country. Notwithstanding this heavy duty the regular importation of opium through legal channels and upon which duty was paid amounted to \$1,500,000 last year.

A clever New York journalist, Franklin Fyles, recently produced a new play called "Overlook" at Boston, and critics commend it as very entertaining, novel and dramatic. Mr. Fyles has written several plays, but "Overlook" is said to be his strongest in conception and originality.

**SHORT-HAND WRITING.**  
Teaching Lessons, 10c.  
Haver College, Fall, Chicago, Ill.  
and 26 State Street, Rochester, N. Y.

**H. & J. CONOLLY**  
**Book Binders,**  
Magazine work especially.  
Call and see samples and get prices.  
Over 95 Main Street Bridge.

**MARBLE and GRANITE WORKS**  
**NELL BROS. & KERN,**  
MANTELS, GRATES AND TILES  
IMPORTERS OF SCOTCH GRANITE  
238 & 240 STATE ST., ROCHESTER, N. Y.

**COKE.**  
FURNACE—In yard, per bushel, \$0.34  
Delivered, 20 bushels, 1.33  
STOVE AND GRATE—In yard, per bushel, .06  
Delivered, 20 bushels, .50  
No charge for ordinary housing.  
CITIZENS' GAS COMPANY,  
27 N. St. Paul street.

**Reading for the Million.**  
We have made arrangements with the proprietors of DONAHUE'S MAGAZINE, so that the CATHOLIC JOURNAL and the Magazine will be furnished for \$2.50 a year for both, in advance. An exchange says of the Magazine: "DONAHUE'S MAGAZINE continues to be one of the marvels of American journalism for the richness of its content and the cheapness of its price. It has in every issue a hundred pages of original and select articles, yet it costs only two dollars a year; and not satisfied with its profusion of reading matter, it occasionally embellishes its pages with timely illustrations. The veteran editor, Patrick Donahue, founder of the 'Boston Pilot,' gives the assurance that his periodical is making a steady advance, and because of its progress all his friends rejoice with him in his joy."

Address  
**The Catholic Journal**  
327 E. Main St.  
Late with E. A. HOFFMAN & Co.  
OPEN ALL HOURS:  
**JOHN A. MATTLE,**  
**UNDERTAKER**  
92 N. Clinton and 69 Franklin Sts.  
Telephone 680.

**NO. 4 COAL**  
ALWAYS ON HAND.  
J. A. Van Ingen, 91 Smith St.  
Telephone, 275 D.

ASK FOR  
**AMAN'S**  
**Soda Mint Alterative.**  
USE

**AMAN'S**  
**G. G. Remedies,**  
Internally and Injection.  
TRY  
**AMAN'S**  
**COMPOUND COUGH SYRU**  
All these Remedies are Manufactured and Sold by  
**H. AMAN,**  
167 N. CLINTON STREET.

**Memorial Photographs,**  
Cabinet Size, Suitably Inscribed,  
ONLY \$2.25 PER DOZ.  
Send photo or tintype to copy it on  
ONE POETRY CARD 25c.  
MEMORIAL PHOTOGRAPH CO.  
Rm. 1, 37 E. Main St., Rochester, N. Y.