## The Joys of Home Owning - Chapter 83 or Why On Earth Didn't You Just Call A Plumber?

Do-it-yourself home repair projects are commonly rated by the number of trips to the hardware store. While this is an accurate indicator of the degree of frustration experienced, it may not be an objective index of the difficulty of the job. It does not take into account the years of experience and the accumulation of tools and obsolete hardware in the garage which can be brought to bear on the task. To simply say that this was a ten-tripper without acknowledging that I have been a homeowner for twenty years might just reflect poorly on my abilities as a plumber rather than emphasizing the unique combination of naïveté and hubris which led me to undertake the project.

The faucet on the sink in Judith's bathroom had been dripping for quite some time. Twisting the handle extra hard would usually stop it, but this generally required getting up out of bed just as I was being lulled to sleep by the sound of the rain leaking through the roof above the bedroom ceiling. Because I had long ago abandoned trying to make the stopper work in the faucet that I had installed on the sink, each drip would fall straight down the drain into the trap where it joined its predecessors with a resounding plop. Sometimes it would drip for a while and then stop for no apparent reason, only to resume again once I had banished it from my mind.

One morning during the holidays after Judith had great difficulty going to sleep because of the dripping, she said something like, "We really have to do something about that faucet." Why I responded the way I did is something I need to work through with a therapist, but the bottom line is that I decided to have a look at it. I had looked at it once before and wisely decided that it was better to keep getting up out of bed to twist the handle. This time, however, I decided not to be such a wimp about it. I know that normally a dripping faucet can be repaired by just changing a washer in the faucet stem, and I figured I would just approach this situation rationally and cautiously.

Recently I had replaced the plastic handles on the faucet because one had broken (perhaps because we were turning it so hard to make it stop dripping). In doing this I discovered that the faucet was not the original 65-year-old plumbing with which I have often done battle in other parts of the house, but a cheesy modern replacement which, to the best of my recollection, I had personally installed at some point. This meant the chances of being able to disassemble .it and replace the washers in the stems should have been fairly good.

Preliminary inspection revealed a high level of corrosion around all visible parts of the hot and cold valves. It also left me puzzled as to how I was supposed to be able to remove the stem when I did not have access to the nut holding it on. My first trip to the hardware store was a research outing. I went to the plumbing store where I knew that I would have bought the faucet and where the guys behind to parts counter seem to like to do private tutorials on plumbing technology and installation technique. All I needed to know was how to remove a stem from this particular Price Pfister faucet. The answer, of course, is obvious; except when you are looking at a corroded version of the faucet. The escutcheon unscrews and lifts off, providing access to the top of the stem. After I had mastered this lesson, we embarked on a brief discussion about the cost and availability of various parts which I suspected I would need to replace after I took the faucet apart. The principal message here was that I might as well think about buying a new faucet if I had to replace more than one or two parts. Armed with this information I returned home and began my attack. I was able to remove the escutcheon with vise grips or whatever you call the adjustable "channel lock" pliers that are guaranteed to chew up any metal object you use them on. I wasn't concerned about damaging the escutcheon though. It was so corroded that it was already on my new parts list.

By the time I had removed the stems from both the hot and cold valves I knew I was probably looking at replacing the whole faucet, so I asked Judith if she had any ideas about what kind of faucet I should get. Fortunately I still had some catalogs we had consulted when we remodeled the other bathroom. She looked over the catalogs made a preliminary choice and offered to accompany me on trip number two in order to make a final selection from what was actually in stock. Since it was New Year's Eve I had thought to check on my first trip to see how late the plumbing store would be open. I knew that the trip to buy the faucet was not going to be my last trip to the store and I wanted to be able to make at least one more trip after further exploratory work. The plumbing store was going to be open until 4 o'clock. Needless to say it would be closed the next day, but I thought three or four hours would be plenty to do the job.

They had the first choice faucet so we bought it and looked around at their kitchen cabinet displays contemplating other improvements that could eventually be made to the house.

When I began removing the old faucet, I discovered that the shutoff valves beneath the sink were not really working, so I figured I might as well replace them while I was at it. Trip number three was to buy new shutoff valves and flex pipe to connect the valves to the faucet valves. Needless to say I went off a little half-cocked and didn't take the old pieces with me. The parts guy listened to a bit of my story and then seemed perfectly confident that what I needed was half-inch connectors on both ends of the flex pipe. I was swept along by his confidence based on superior knowledge, but I was a bit thrown by the fact that the piece of flex pipe he wanted to sell me was 20" long. I remembered the old one as being very short. He said the shortest they had was 12". I looked at both lengths and debated the merits of each and then decided to call home and ask Judith to measure the old piece and the distance between the shutoff valve and the faucet valve. The old piece was about six inches long and bent in an S shape. I decided to go with the 12" piece although the guy behind the counter advised me that it was often better to use a long piece and make a loop in it rather than trying to bend a short piece into an S. The flexible tubing will kink if it is bent to sharply.

I turned off all the water in the house and removed the shutoff valves. What I encountered was a problem I had seen in the downstairs bathroom and backed away from. The end of the pipe coming out of the wall was corroded and breaking apart. In the downstairs bathroom this causes a leak at the shutoff valve, but I dealt with that by just putting a bucket under it and emptying it periodically. Here I decided to take the bull by the horns and treat the cause rather than the symptom. Using my marvelous "plumber's saw" I cut off the very end of the pipe coming out of the wall for the cold water. There was still enough of the threads left on the pipe to screw on the new shutoff valve securely. I was flying high and attacked the hot water pipe with confidence. It was in much worse shape. Once I cut off the corroded part, I could just barely screw on the new shutoff valve; and I had no confidence its ability to stay put.

I decided to get a tool that would enable me to extend the threads on the pipe. I had seen professionals do this and a colleague at work had even shown me how to make threads in a brass fitting once. So trip number four was to a different hardware store in search of a pipe-threading tool. They had them, but they cost about \$100. Since I live in Los Angeles and it was still only about 3:30 PM on New Year's Eve, I was

able to drive to another establishment just as close to home and rent the same tool for \$12.50. The only problem was that no one was certain which size cutter I needed. I was pretty sure that I had heard references to half-inch connections at the plumbing store, but it was also obvious that the pipe I wanted to thread was three-quarters of an inch in diameter. I went with the 3/4" cutter, took it home, discovered it was too big and drove back to the tool rental place to exchange it for the 1/2" cutter. (My guess was that the designation refers to the inside diameter of the pipe since it is the inside of the pipe that plumbers are most interested in.) In the process of all this I did receive further enlightenment as to how to use this tool, but I was a little apprehensive since it was such a big mother. I had visions of cranking it and having the pipe break off inside the wall. (This is where the twenty years of experience comes in. Even though you never learn better, you do at least develop a healthy level of paranoia.)

Mirabile dictu! I was able to extend the threading on both pipes enough to let me feel the new shutoff valves were securely attached to the pipes. This enabled me to turn the water back on for the rest of the house so that Tristan and Isabelle could begin dressing for their night out. Fortunately Judith and I had decided not to go out this New Year's Eve.

The actual sink in question is a sixty-five year old pedestal sink, which is fairly small and is bolted to the wall. The only way I could remove the old spigot was to take the actual sink off the pedestal. I was encouraged by the deduction that I must have done this when I installed the previous faucet; though, of course, my brain had mercifully erased any recollection of what was involved in this process. I approached this task with caution since my brain had not erased the recollection of how I cracked a porcelain toilet bowl in half by tightening a bolt one turn too far. However, lifting the sink convinced me that it was not likely to break anytime in my lifetime, and I shifted my concern to what kind of damage 1 could do to the tile on the floor when I set it down.

Having the sink on the floor made it much easier to struggle with the various parts I was trying to remove. Both the valves were so corroded that I could not unscrew them no matter how much Liquid Wrench I soaked them with and how much I chewed up the nuts with my vise grips. For a brief, fleeting moment I feared that I had reached a dead end from which only professional help could extract me. I took a coffee break, ate some cookies and decided to try to saw them off. Once again my plumber's saw, which I highly recommend, came through. Eventually I got all the old fixtures off the sink. The sales person who sold me the faucet had asked if I was going to install it myself and commented that the hardest part was removing the old faucet. So I congratulated myself on being over the hump.

When I began putting the new faucet onto the sink, I discovered that the instructions called for the use of plumber's putty or silicon sealant, neither of which I had in stock. The only putty I had in the garage was as hard as a rock. By now it was after 6:00 PM. I knew the hardware store was going to be closed, but I drove by there anyway. Sure enough the last employees were just leaving after having locked up, so I went to the 24-hour drugstore which also carries a small selection of hardware items. They didn't have plumber's putty, but they did have silicon sealant. Confidant that I had just made my last trip I returned to assemble the faucet. The actual parts did not match the parts shown on the instruction sheet, but I have come to expect this. It's just one of the many ways the home maintenance industry conspires to intimidate homeowners into using professional help. The good news was that the faucet had been redesigned to include a rubber washer beneath the drain flange where the instructions said you needed to apply the plumber's putty or silicon sealant. In other words the last trip had been unnecessary, but I was glad to have a little silicon sealant in my arsenal

anyway. I also had a large foam washer that was not indicated in the instructions and did not seem to fit anywhere. I knew the guy behind the parts counter would tell me not to worry about it, but I don't like having unnecessary parts including with things I buy. It hadn't occurred to me yet that the attempts to intimidate me would have reached a point where the manufacturer would throw in surplus parts with every item it shipped.

I discovered another discrepancy while assembling the faucet. I had bought a faucet with lever handles, which means the cold faucet should turn on in a clockwise direction and the hot faucet should turn on in a counter-clockwise direction. What came with my faucet were two valves clearly labeled "H". In my heart of hearts I knew that this meant they both turned on counterclockwise, but my inner child hoped against hope that one was just mislabeled. The only way I could know for sure was to assemble the thing, hook up the water and try it.

There was also a problem with the new spigot, though. The sink is so small that there was not room for the T connector which screws onto the bottom of the spigot to rotate completely. In other words the only way I could screw it on was to turn the spigot around and around while I held the T-connector. This was not really a problem since I had taken the sink off the pedestal, but the spigot was designed in such a way that the T connector is at a slight angle when it is fully tightened rather than being at a right angle to the spigot. This meant that is was such a tight fit that there was no room to attach the connection for the water. Although the main objective in all this was to stop water from coming out of the spigot when we were trying to go to sleep, it really would not do to have no water ever come out the spigot.

I decided as a temporary measure (Desperation starts to set in after six or eight hours on a job.) to put the sink together with the spigot a little loose and at an angle if that was what it took to hook the water up to it. At least I could restore the sink to a basic level of functionality and test all the other components of the system. This was a good thing because when I reassembled it and managed to get it back onto the pedestal, I discovered that the 12" flex pipe got kinks in it just as the parts guy had warned me it might. So I couldn't really hook the water up to the faucet. I did try, but it was clear that the flow was restricted. After a glorious moment of water gushing out of the new spigot, the faucet ceased to work at all. I figured this must have been because of the kink in the flex pipe, but when I really thought about it I realized that something more was clogging the faucet. I assumed it was the debris from the pipes. All kinds of pieces of corroded pipe and mineral deposits had gotten all over everything when I removed the old faucet so it was no surprise that some of this stuff might be clogging up the new faucet.

In any event I knew I needed different flex connections and I now knew for sure that I had two hot valves. I also knew that I needed some kind of creative solution that would permit me to connect the water to the spigot and have the spigot both tight and straight. These were challenges that could not be addressed without another trip to the plumbing store, so I decided to call it a night. I think it was about 8:00 or 8:30. Judith very thoughtfully offered to cook up some pasta, but by the time we actually sat down together I was in such a foul mood that I was impatient and nasty and put the crowning touch on the day by totally spoiling any hopes there might have been for celebrating the end of the year.

One New Year's Day I got up relatively early (for me) to see Tristan and Isabelle off on their trip to Northern California and the ski slopes. After they left, I felt a need to get out of the house so I went to return the pipe-threader (Yes, in LA equipment rental facilities are open on holidays.), and then drove down to Redondo Beach to watch Ragnar play in a soccer tournament. I had lunch with Ragnar and Betsy and then decided to stop by the hardware store on the way home. Unfortunately some hardware stores are also open on holidays since so many people like to devote their holidays to home improvement projects. I perused the selection of flex pipe and decided to get 16" connectors rather than the 20". I got home and discovered that I had bought the kind that had a different kind of fitting on each end rather than the same kind on both ends. Since I needed the kind with the same connector both ends, I made another trip to the hardware store to exchange them. I didn't bother going to the plumbing store because I knew they would be dosed. (They're not even open on Sundays.) I did enough work on the faucet to determine that 16" flex connections would work just fine, and then took the rest of the day off.

The next morning for some reason I couldn't sleep late the way I usually do when I don't have to go to work. I got up and figured I could get an early start on the faucet and then have some time to myself in the afternoon. I went to the plumbing store. After about an hour of discussion with three different people, I had the solutions to all my problems. The only hitch was that it meant completely removing the spigot I had installed so that I could swap it for a slightly different version. This meant removing the sink from the pedestal again, but, hey, I was into it this far so I might as well go the distance.

It may be worth a brief digression to explain the solution to the problem with the spigot. The faucet we bought was a less expensive imitation of the faucet that we had chosen for the other bathroom. That faucet was made in Germany and took a few weeks to order. The cheaper imitation version is made in California and sold by this plumbing store under their own brand name. It looks more or less identical, but the finish is not as nice, and it is more cheaply manufactured. The imitation version has gone through at least one re-design, which is why the instruction sheet does not match the actual parts. What I had originally gotten was the new design; what solved my problem was the old design. I suspect that when the faucet was originally copied, the manufacturer copied the internal design as well as the external. Then later they redesigned it internally to make it cheaper to manufacture. In the process they changed the T connection so that it was all one piece rather than being several separate pieces as depicted in the instruction sheet. The original design permitted the T connection to be at any angle to the spigot, and in the case of my sink it makes all the difference in the world. Fortunately the store still had a spigot of the original design in stock and there was someone there who understood my problem well enough to know that the older design would solve it.

So I took the sink apart again and removed the spigot so I could exchange it. I also got a stem which changed one of the hot valves to a cold valve and I had gotten an advanced tutorial in drain flange installation which included the recommendation that I just discard the thick foam washer that had come with the faucet. It also included the acknowledgment that I did not have to use plumber's putty beneath the drain flange if I had the rubber washer. But the guy standing next to me at the counter said he always put plumber's putty under a drain flange and that using silicon sealant was a bad idea since it made it hard to remove later. I bought some plumber's putty just in case.

After I made the trip to exchange the spigot assembly and bought some more Teflon pipe tape while I was there, I put the sink back together. When I went to install the cold valve I discovered that it was binding when I tried to turn in on and off. It didn't turn as freely as the hot so I figured I should take it apart to see if some bits of pipe or mineral deposits had gotten caught in the stem. I discovered that the stem was bent because the guy who sold it to me had tightened it too much when he put it into the valve. This would never do, so I went back to the plumbing store to exchange it for an unbent one, which I had screwed into the valve by a different salesperson.

I was now confident that I had everything I needed and had made my last trip to the store on this project. I re-assembled the whole sink, turned on the water, and discovered it leaked around the drain. I had not bothered to remove the drain and put plumber's putty beneath the flange because it seemed to be so tightly installed. I concluded that the plumber's putty was essential after all and I managed to remove the drain without taking the sink off the pedestal. I put plumber's putty under the flange and tightened it back down again as well as I could. I couldn't really get to it well enough to tighten properly with the sink on the pedestal so now the drain leaked even worse than it had before I applied the plumber's putty. I took a coffee and cookie break and then bit the bullet and removed the sink from the pedestal again. I re-applied the putty under the drain flange and tightened that sucker down with a socket wrench I had acquired during a previous plumbing adventure. I also discovered that the extension to the drain was not screwed in tightly. I hadn't even realized that it was a separate piece which screwed into the body of the drain and it occurred to me that the leak I had seen might have been because the extension was not screwed in tightly. So I put pipe tape on the threads and screwed it in as tightly as possible.

I put the sink back together and discovered it was now leaking at the other end of the trap. After futzing with this joint for a while I realized that it was not seating properly because the extension to the drain was too long. Sixty-five years ago they didn't install pipes to the same standards they do now so the distance between the sink and the drain is tighter than normal. I could smell victory at this point so I didn't hesitate to get my plumber's saw and shorten the drain extension by half an inch.

Seems to me I may have skipped one additional pass at disassembling and reassembling the drain; but after I got it back together and tested it this time, I was satisfied that it was never going to get any better. I could see a bead of water gathering at the joint between the drain and the extension when I let the water run for a while. Rather than risk creating a bigger leak elsewhere by tearing everything apart again, I decided to call in the silicon sealant. I dabbed it all around the joint with my finger since I had already lost the spout that came with the tube. It has to cure for 24 hours, so I won't know until tomorrow whether it has really stopped the leak. I cleaned up in time to eat a late supper.

I might add that during the last two hours of this I was playing religious music on the stereo, and I suspect that the Lord was so impressed with my positive attitude that he finally decided to give me a break.