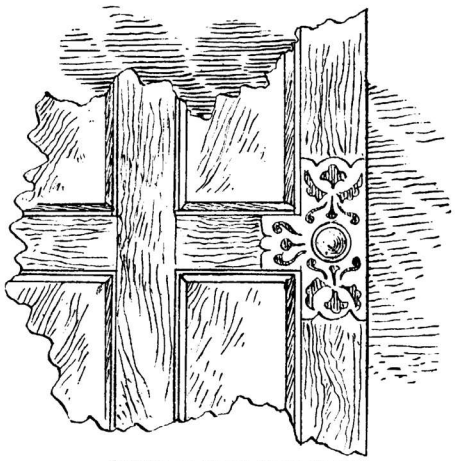
Door Plates.

No doubt every person has noticed on a door much in use that at one spot just about the door-knob the paint has been worn off, or is blackened and soiled by the continual contact of the hand in opening or closing the door. A number of devices have been tried to remedy this trouble, but few of them have ever lasted long enough to establish a reputation. Some housewives paint the stile of the door for about fourteen inches in length, and the rail for three or four inches in length, with good lamp-black paint and linseed oil. But the trouble with this is that for a short time it hides the dirt, but, when it wears off, it leaves the door in a worse predicament than ever, and it does soon wear off. Iron plates have been tried, and they do fairly well but are unsightly, and though blackened by the Barff process, the black wears off and the iron rusts. So far, nothing answers as well as brass, either silver plated, or nickel plated, or better still, left in its native state. The sketch shown herewith illustrates a brass door plate, through which the spindle of the door knob goes. This is made of sheet brass, and can be made by any clever workman who has access to an ordinary scroll saw, or jig saw. The brass may be about 18



SKETCH OF BRASS DOOR PLATE.

gauge, and the saw should have very fine teeth, not less than twenty to the inch. Holes for round-headed screws and to insert the saw should be drilled through the plate before the sawing is commenced. A good way to work them out is to saw two at a time, and to place them between two thin pieces of wood, paste the pattern on the top piece of wood and follow the lines, sawing through the whole four thicknesses at once. This makes a very handsome plate and will protect the door for a whole life-time. Enough screws should be put in to hold the brass firmly to the door. It may be polished with a little fine emery rubbed on with a cloth moistened in sweet oil, after which rubbing with rotten stone and water will give the brass a fine soft polish; and an occasional rubbing will keep the brass in apple-pie order.

Hanging Sashes.

THERE is no reason why a sash should not be so hung that the slightest touch of the hand will move it to the desired position, and yet have it fitted so close that it will not chatter with the wind or allow a gale to enter the room. One of the reasons that sashes do not work well is, that when the frames are made, sufficient care is not taken to make the pulley stile straight and true on the face. Often these are left hollow in the centre; then the sash must be made wider at the meeting rail than it is at the bottom or the top rail, if it is to fit snug. This being the case, it is impossible for the sashes to slide either up or down, so the workman is compelled to narrow the sashes at the meeting rail in order to allow them to slide, and the consequence is that a certain amount of playroom obtains between the sash and the jamb at the meeting rails, which is sure to cause rattling at that point when the wind blows on that side of the house. To make a good tight window, and one in which the sashes move easily, the pulley stiles should be straight and parallel to each other. Another condition that must be complied with to insure satisfactory results is, that there must be as little "play" as possible between the sashes and the stops. A rough workman will leave from 3-32 of an inch to ⅛ of an inch play, in order, as he imagines, to allow for the space required for five or six coats of paint, and this leaves lots of room for "rattle." One-sixteenth of an inch space between side of stile of sash and stop is ample, and more, to allow for paint. A good painter does not besmear his work, but puts on his paint so deftly that it would require fully one hundred coats to make an inch in thickness; hence, six one-hundredths of an inch would be all the space required to enable the sash to move with freedom in its frame. Sometimes window frames are forced out of shape after they are "set" in the walls. If the building is a frame one, the siding or other covering is cut in too tight against the casings, and this is apt to force the middle of the frame inwards, making the pulley stile convex or winding on the sash side. When this occurs, it becomes next to impossible to make the sashes slide easily in their frames, for the lower part of the lower sheet will be wider than at the meeting rail if it fits snug, and it would be impossible to raise it. This necessitates planing off the lower part of the stiles until the sash is the same width at the bottom as at the meeting rails, a condition that is sure to cause a rattling window. The top sheet, of course, will have to be treated the same as the bottom one, which gives both sheets an opportunity, whenever the wind blows, to play a "rat-a-tat-tat" while the storm lasts, much to the inconvenience of those occupying the room where the window is situated. When sashes have been properly fitted and hung, and the weights and sash lines tested and properly secured, the "pocket" cover should be nicely screwed in place and left with a smooth face, so that the sliding sash will not make any abrasion, or have more friction at the joint, than elsewhere. The pulley axles should be lubricated with graphite, black-lead, or, if this is not available, a little hard mutton tallow should be placed in the axle bearings; this will make them run smooth, or at least smoother than if left without some sort of lubricating matter altogether. The common sash pulleys are poor things at best, and should never be used in good buildings, as they make as much noise when in use as a locomotive running at full speed. The best pulleys in the market are not any too good, as they are made as cheap as they can be turned out, and are rough and untruthful. The best axle pulleys are made in England, but they are costly. The axle is of fine steel, turned true in a lathe, and it runs in brass bearings, and there is a small hole in the stile-plate where a drop of oil may be inserted on the bearings when necessary. When a sash "sticks" in