FIAILER Wood-Worker

HARDWOOD FINISH.

COUNTRY builders who have always been accustomed to finishing their houses with pine or other soft woods experience some difficulty in getting a proper estimate of the extra labor required to finish in hardwoods. It is safe to say that the cost of labor in finishing off a room in therry, black birch or white ash, is about double nhat it would be if finished in white pine. Black ash or elm finish takes about 50 per cent. more time to put in proper shape than pine, and oak, red or white, costs a trifle more to finish than therry or black birch. Lumber cut from the butt logs of the black birch is one of our handsomest woods, and is strong and durable and will take a polish as high as the best cherry or mahogany. For newels, hand-rails and balusters it is superior to walnut, and much stronger, works better in the lathe and is less apt to chip er sliver under the carver's tools. If not quartered when sawn, it has the fault of warping, and will be affected more or less by atmospheric changes, but on fixed work this may easily be prevented by proper fastenings, and in freework, such as doors, sashes, venetian blinds, etc., quartered stuff should be used, or the doors and sashes should be "built up" with the grain reversed, which will prevent warping and twisting. This latter method is expensive, but insures lasting and satisfactory work, but when economy is the rule, quartered stuff worked solid answers very well. The working of hardwood of any kind requires more skill, a better class of tools and more exact workmanship than the working of pine or other soft woods, and these items alone entail extra cost. Where hardwoods are to be finished in a natural state great care should be taken to prevent lime stains, consequently it is better in all cases to put no finish until the plasterers have fully completed their work, for a lime stain on cherry or birch can never be taken out or completely covered without stainmg. In the absence of birch or cherry red beech makes a very handsome finish—in fact, beech has some beauties no other wood has, and when quartered and properly finished has a metallic sheen that is charming and unique.

The whole trouble with line shafting is that too many incompetent people think they know how to make it and how to put it up. In truth, however, a line shaft is a comparatively delicate piece of machinery, and its making, erection and maintenance all require good engineering sense. With this its friction ought to fall far below that which many experiments show to exist. But the average line shaft, it must be remembered, is a wriggling, squirming body, trying hard to preserve a straight line against the evil efforts of uneven bearings and injudiciously placed driving pulleys.

MR. JOHN PIGGGTT.

In the accompanying cut is portrayed the countenance of one of the leading lumber dealers of Western Ontario, in the person of Mr. John Piggott, of Chatham, Ont. His first connection with the business was about forty years ago, as the following particulars of his life will show.

Mr. Piggott was born in Oxfordshire, England, in the year 1842. Emigrating to this country in 1848, he settled at Woodstock, Ont., spending his school days there. In 1859 he removed to Thedford, Ont., where he was engaged in the square timber and stave business. In 1869 he decided to leave that section of the country, and located a lumber yard at the corner of King and Forsyth streets, Chatham, where his office is at the present time. Then there was very little pine lumber used in that section of the



Mr. John Piggott.

country. His first stock of lumber was purchased from the late Peter Christie, of Toronto, and the first year's business was confined to about 500,000 feet. Steadily since that time his trade has increased, and last year's turn-over aggregated over 5,000,000 feet.

In the year 1884 Mr. Piggott found that to run a lumber business successfully it was necessary to have a planing mill, and at once set to work to erect the present factory at the corner of 'King and Second streets. Three years ago he purchased the lumber yard, planing mill, stock and wharf property of W. G. Nutson, in Windsor. In July of the following year this factory was destroyed by fire, but in nine weeks a more modern structure was erected and in operation. Upon purchasing the Windsor property Mr. Piggott admitted his sons as partners, under the name of John Figgott & Sons. The money invested has been earned entirely by the business. The firm make a specialty of turning out fine house finish in white pine, Norway pine,

Georgia pine, red oak, black ash, cherry, birch, and all kinds of native woods. At present they are getting out the interior wood-work in quartered red oak tor a fine residence in Winnipeg, Man. They manufacture mantles, office and bank fittings in wood.

The subject of our sketch has been given many positions of honor in the city, having served as a member of the Council and as president of the Agricultural Society. At the present time he is president of the Board of Trade.

WOOD WARPING.

Woon, particularly hardwood, that has not been properly sawn, is almost sure to warp or twist some extent in the seasoning. A board cut from the side of a log has the grain rings of the wood lying in circles having a greater length on one side of the board than on the other, and it is quite natural that these rings will endeavor to close as their circumferences get shorter by seasoning, and in closing they bend the board over, or, in other words, warp it. If the rings at one end of the board are out of line with the rings at the other end, which is frequently the case where the log was originally crooked, then the board will both warp and twist, as the rings do not shrink uniformly. Much can be done to prevent warping and twisting in the piling of the stuff. The boards should be laid on their flat side with the side down that shows the concave or hollow curve of the rings; battens or weather strips should be laid across the pile at regular intervals, and always directly over the corresponding battens below; then put another tier of boards on these again, and so on, until the pile is completed. The pile should have an inclination to carry off the rain, and should be topped off with rough boards enough to keep the pile dry. It is not best to pile the lumber where it will get too much sun or drying winds, as lumber seasoned too rapidly is apt to crack and check. Of course the best boards, boards that will not warp or twist, are "quarter sawn." It makes no difference what the lumber may be, whether it is pine, oak or ash, if it is quarter sawn it will not warp in drying nor yield so readily to changes of the weather. It has the disadvantage of being more expensive, as in sawing each quarter a narrow board is first taken, then one a little wider, and so on until the whole quarter is cut. Quartered oak, of which we here so much nowa-days, never changes its shape after it is worked, "it stays where it is put," as the carpenters say, a quality that is very valuable. Another advantage of "quartering" is that you get all the beauties of the grain shown up to better advantage than if the boards were just "sliced" from the round log.

An old wood-worker says maple is not fit to make a top of, whether quarter-sawed or not. Quarter-sawed is better for the weather, but quarter-sawed maple will shrink in thickness, and common sawed will shrink in width. The one is almost as bad as the other. The grain is so hard that glue will hardly penetrate it. It is very cheap, and the supply is greatly in excess of the demand. Log-run maple is offered at \$10 and \$12 per thousand. In many cases it is maple, beech and birch together.