

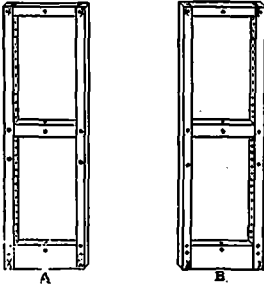


MAKING BLINDS.

By OWEN B. MAGNIN.

AS there are few mechanics outside of sash and blind shops who know how to properly make a pair of outside blinds, the following description showing how to commence and carry through a job of this kind may prove useful to any one who may have a pair to make:

Having the frame stuff (generally $1\frac{1}{2}$ inches thick in ordinary work,) sawn to the necessary lengths and widths, the first operation is to wind the stiles in this way: Take a pair, and having marked the face, sides and edges of each, lay one—which we will call the left stile—on the bench with the face edge from you and proceed to take a fore plane shaving off each top and bottom



corner on the stile as shown on the left hand side of the blind A. Do the same with the right hand stile keeping the face edge to you instead of from you like the last. When the rails are turned into these stiles the blinds will be in wind about a $\frac{1}{2}$ inch or the top right hand corner will hang in when the blind is hung on its hinges.

The stiles for the right hand blind are similar, or in other words, the stiles are all faced alike and can be turned end for end without altering the face marks or wind.

The reason for winding the stiles is this: When the blinds are closed the left hand blind B from the inside touches the window frame at the bottom outside corner, and the top stick out as the frame winds, and when the right hand blind (from the outside) is pulled to, the top outside corner presses the top outside corner of

the left hand blind and draws it in against the frame and the catch at the bottom holds the joint tightly together, making the blinds level close against the frame and a tight joint on the relate.

When laying out the stiles for mortising make the mortise the same width both edges, as the tenon fills it entirely, and there are no wedges used as they are liable to work loose with the constant wetting and drying of the weather. The shoulders of the rails are held to the edges of the stiles by pins driven through the mortise and tenon when the frame is in the clamps.

Cutting the slots should be very carefully done, and one or two of them should be tried in the frame, bringing the shoulders up with a couple of hand screws to see they work freely in the holes before planing, and they should be placed oval and the edges properly rounded. The rods should next be cut and worked to the usual shape and the ends rounded to the same shape as the edges.

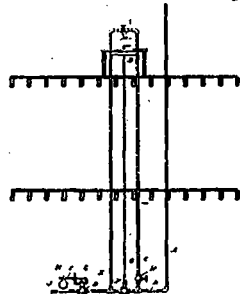
Before wiring the slats place them all together and with a try square mark the position of the staples (both points) on the poorest edges, and then drive them in. The slats can then be fastened on the rod which is marked from the stile, and the slats placed in the frame which is primed and cleared off.

This is the simplest method of making blinds by hand. They are, however, usually made in factories by a much quicker process, but if there be any builder stuck for one or even a pair of blinds, the above will aid him in making a sure job.

RECENT CANADIAN PATENTS.

System of Water Supply.

No. 28,952. William G. Russell, Millbrook, Ont., dated 18th April, 1888.

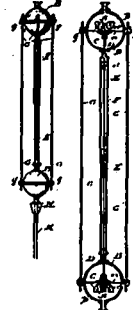


Claim.—1st. The pipes A, B, C and E, connected together, as described, in combination, with the globe-valve F, arranged substantially as and for the purpose specified. and. The pipes A, B, C and E, connected together, as described, in combination with the globe valve F and rod G, arranged substantially as and for the

purpose specified. 3rd. The pipes A, B, C and E, connected together, as described, in combination with the globe valve F, rod G, and relief valve H provided with a lever I and adjustable weight J, substantially as and for the purpose specified. 4th. The pipes A, B, C and E, connected together, as described, in combination with the globe valve F, rod G, relief valve H provided with a lever I and adjustable weight J, and set-screws K and L, substantially as and for the purpose specified.

Water Leakage Detector.

No. 28,899. Thomas Houlgrave, Toronto, Ont., dated 14th April, 1888.



Claim. 1st. The combination of two diaphragms A, A, each consisting of two sub-diaphragms a and a1 connected by a wire E, substantially as and for the purpose set forth. and. The combination of the diaphragms A, A, the connecting wire E, the tightening rod D and the centre-pin C, substantially as and for the purpose set forth. 3rd. The combination of the diaphragms A, A, the connecting wire E and the telescope pipes F, substantially as and for the purpose set forth. 4th. The combination of the leakage detector, the slot A of the cap H, the sound unloading chamber I, the casting L, the key rod K and the cock J, of the water main, substantially as and for the purpose set forth. 5th. The combination of the cap H, the casting L, the key rod K and the cock J, substantially as and for the purpose set forth. 6th. The combination of the cock J, a box L filled with sawdust, and the iron rod K, substantially as and for the purpose set forth.

The pillars used in the St. Clair tunnel will be made from the old G. T. R. car wheels.

The Marble Dealers' Association of Rutland, Vt., at a recent meeting elected as a director Mr. G. A. Sanford, of Halifax, N.S., who has been dead for several years.

At the Cincinnati Exposition Canada makes a fine display of terra cotta, tiles, bricks, building stone, black and colored marbles, etc.

A correspondent of the Montreal Gazette writes concerning the depreciation and in some cases total loss of plant used in the construction of the Panama Canal, owing to neglect and carelessness on the part of those in charge of the work. Quite recently, says this writer, a new 4,000 kilo. crane, or movable crane, went off the line near the Culbra cut. They cost \$2,500 each. Down the slight embankment it went. The intelligent foreman of that section, instead of making an effort to recover it, simply buried it by ordering in a train of dumping cars. The crane was buried and remains buried. Its burial simplified the whole matter. It was not his, and the company had dozens died. Words fail to convey any idea of how machinery has been used there. An engineer told me that three-fourths of the \$30,000,000 worth of machinery on the Isthmus is rusting and much of it is useless, worthless even as old metal, owing to its location. The Canal company takes credit for \$30,000,000 worth of machinery on the Isthmus.

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