Finger joints are primarily intended for end-grain-to-end-grain joining, as in lengthening a board. It is frequently seen in moldings that are to be painted. The joint can be used in longer edge-to-edge joining, provided that the wood is very straight and flat.

For #7862, place the cutters on the arbor or spindle so that the carbide on the upper cutter fits into the flat area on the lower cutter. When properly assembled, the carbide cutting surfaces will be staggered to the front from bottom to top of the stack. The cutters will rotate about an eighth of a turn and stop when properly set.

All of the finger joint bits must be used in a router table with a fence. Set the fence so that you are cutting the full bit profile. The inside edge of the bit should actually shave some length off the wood piece.

Set the height of the bit based on the thickness of the wood that you are using. Ideally, there should be a solid finger on the top and bottom of the joint. Avoid a thin shaving here that could break out or stick up when gluing.

Run all of the pieces you need for one side of the joint. Then adjust the height of the bit to match the cut pieces. Align by matching the fingers that were cut on the first board with the fingers on the bit. Then cut the other side of the joint. Use a push block or miter gauge to feed the pieces.

Glue, clamp, and sand for a perfect joint.