shaft S should be moved slightly around, if the lever strikes the end of the slot in the gauge Adjust the slot at the bottom of the gauge so that the shifter will always work freely. In bolting the shifter to the frame be careful to let the lip on the left hand come against the frame. When adjusted so that the vibrations of the swing give the proper vibrations to the gauge for the desired thickness of point and and butt, then screw up the two screws in the post just enough to have the gauge, in vibrating, come fairly against their ends alternately. Do not screw them through so far as to strain the shifter each time. A little practice will make all easy.

FILING, SETTING, ETC.

The saw should be filed as nearly square across as possible, both front and back. File with the set, or from both sides. NC-1780

Keep the teeth as nearly the original size and shape as possible, except that for hard wood they may be made a little less hooking. If allowed to become much shorter than at present much more power will be required.

Never set after filing, and use the least set possible. If you would do smooth

work, set as little as possible and very carefully. A set and gauge accompany each machine. The gauge is always to be applied to the flat or outside of the saw. It cannot be properly set in any other way. The saw should be jointed till perfectly round, and occasionally afterwards, to

keep it so.

TO OPERATE THE MACHINE.

The block to be sawed is placed in the swing carriage 2, against the gauge J. the dog H is brought down on the block by means of the handle C, and by pressing on C the block is securely held in place and the swing moved past the saw, making a Shingle or piece of Heading, as the case may be. The weight D draws the carriage and block back. Then the dog is slightly raised and the block pressed against the gauge by the left hand and knee of the operator, and the dog secured as before. The Llock sliding on the ribs of the bottom of the swing, moves very easily. The small dog attached to the bottom of the swing engages alternately with the two small levers B on the rock shaft S which vibrates the gauge J for sawing Shingles. For sawing Heading, the rock shaft and small dog at bottom of swing are not used. By means of a small handle, not shown in cuts, the operator is enabled to cut two or more points or butts successively from the same end of the block. This attachment is so placed, near the handle C, that the operator an control it with facility and ease, without quitting his hold of the swing handle C.



WHEEL JOINTER FOR SHINGLES AND HEADING. This engraving represents my Iron Wheel Jointer for Jointing: gen pate Wh

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