Fitting Clifton Plane Irons in Bailey Planes

A I'd like to upgrade my old Bailey plane with your Clifton iron and 2-piece chipbreaker, but I saw a note on an internet woodworking forum saying they aren't compatible. Do you know if that's true or not?

Q Yes, I do—and the answer is maybe. There are three conditions that must be met for Clifton double irons (iron & chipbreaker together) to work on Stanley, Record, or other Bailey pattern planes.

First, your lever cap screw must be at least 7/8" long under the head to accommodate Clifton's 1/8" iron and 1/8" thick chipbreaker. Two of my planes I checked here at the store, a pre-1920 Stanley No. 6 and a 1980 Record 07, both had screws that long.

Second, your depth adjustment yoke must work with the slot in the Clifton chipbreaker. The yoke must stand at least 9/64" above the surface of the frog in order to reach through the Clifton iron and engage the chipbreaker. Also, the yoke must be able to move the iron forward far enough to set satisfactory depth of cut. If the forward edge of the slot in your plane's native chipbreaker is not less than 3-11/16" from the front of the chipbreaker, you should have no problem on that score.

Finally, the width of your plane's throat opening is critical. Nothing less than .200" will work. New planes all seem to have throats more than wide enough, but our old Stanley's throat was only about .151" wide, and it couldn't handle the Clifton iron even without its chipbreaker. My Record plane's throat was a hair less than .200", barely enough to let me install Clifton hardware. I filed the forward edge of the throat to open it to a full .200", leaving a working opening of .015" (about 1/64") with the iron set for moderate depth of cut. That's wide enough to avoid choking on thick shavings, but tight enough to contribute to stunningly good results. The plane feels *solid*, and tearout simply doesn't happen any more, even on reversed grain and around knots. A favorite plane I've used enthusiastically for over 20 years suddenly feels like a far better tool—an experience I heartily recommend to everyone who loves using planes.

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