

A Continuous Pin Support Fixture

By R. G. Sparber

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A video of this fixture in action can be seen at

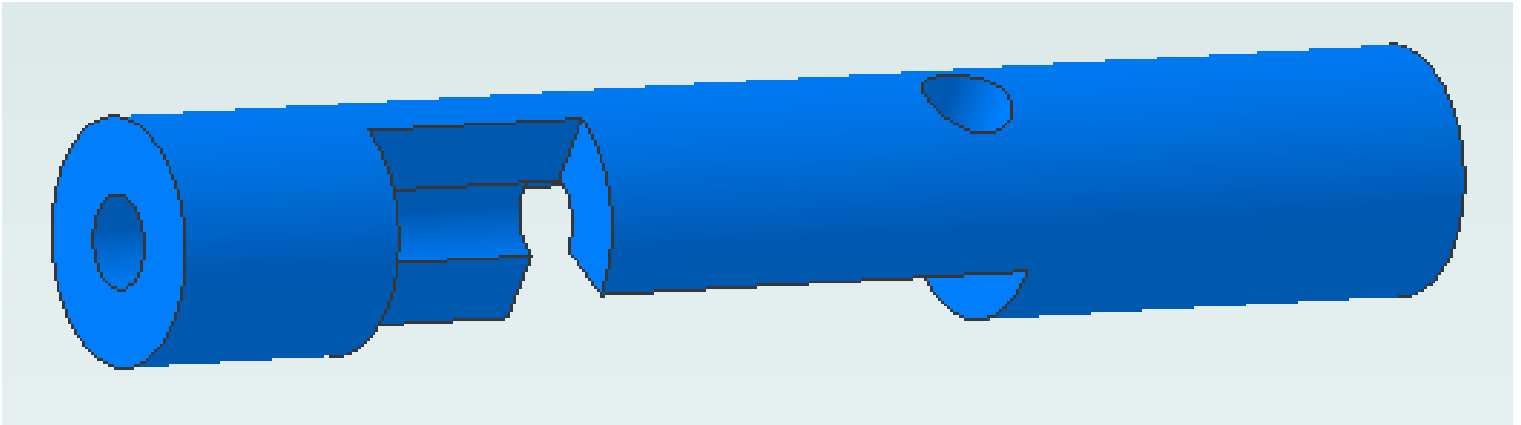
<https://www.youtube.com/watch?v=aJ8uGU7YGvw>



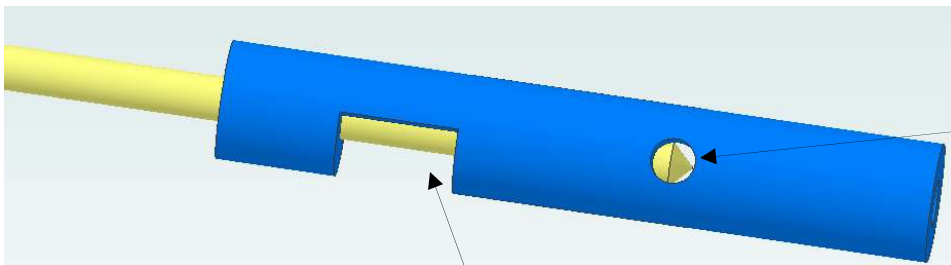
This fixture enables me to cut 3/16" CRS rod into pins about 1" long without stopping the lathe.

The above prototype was actually made about 3/4" too short. The left end was cut to about 1/4" thick but it should have been 1". It still works OK but the drill chuck that holds the fixture doesn't have a lot to grab. Not present in this prototype is the cross drilled hole used to locate the end of the rod.

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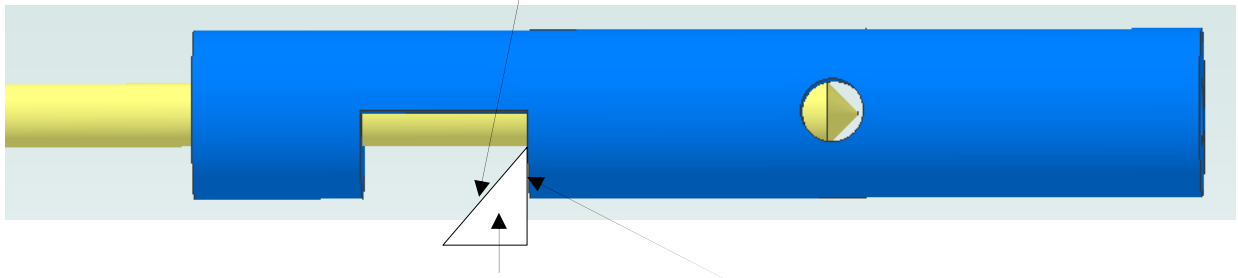
This rendering shows what the fixture should look like.



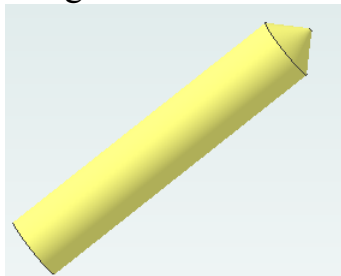
Here you see the rod supported by the fixture.

The previously cut point is visible in the cross drilled hole.

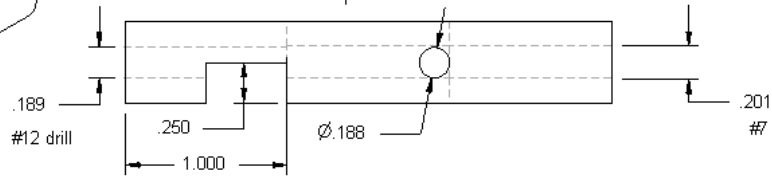
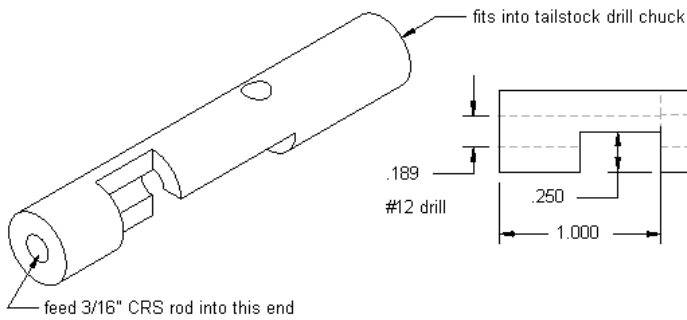
A cutter is fed into the slot. The diagonal part of the cutter does the work.



The right side of the cutter almost touches the right side of this slot and is then fed straight in. This forms the point and parts off the previously cut pin.

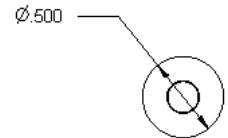
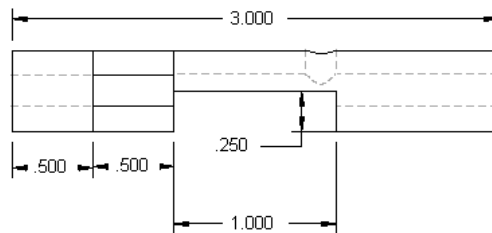


REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



material: CRS

Pin Support fits into tailstock drill chuck with 1/2" wide slot vertical. 3/16" CRS rod, supported by a 3 jaw chuck, slides into the axial hole until the end is visible in the cross drilled hole. A cutter feeds into the side 1/2" wide slot. This cutter forms a point 1" from the end of the rod. When fully formed, the rod has also been parted off. This completed part falls out the bottom. The cycle repeats by sliding the tail stock closer to the chuck.



	DRAWN R.G. Sparber	DATE 3/1/2015	Continuous Pin Support Fixture			
	CHECKED					
	QA					
	MFG		SIZE A	FSCM NO.	DWG NO. 1	REV
	APPROVED		SCALE			SHEET

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Article Alias" in the subject line.

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