

Casting the Ram Cap, and Angle Plate, and lots of Ingots

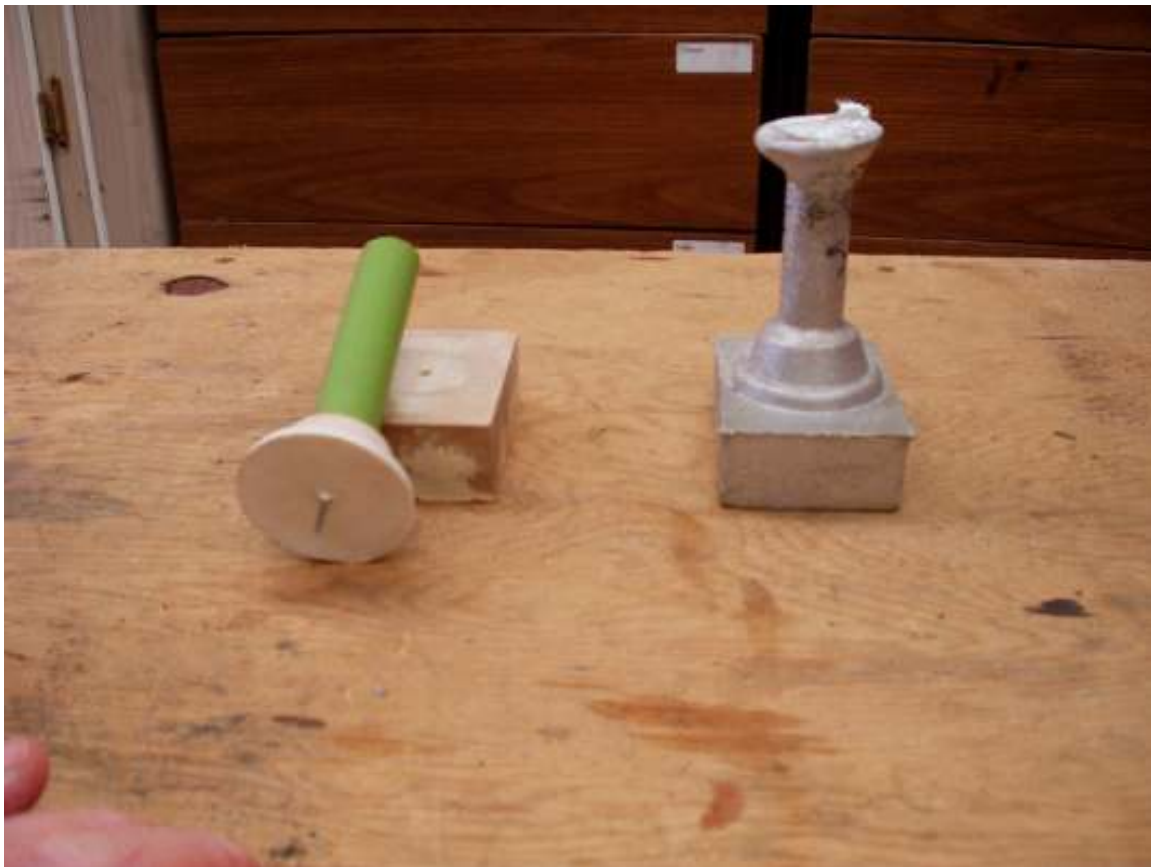
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The Ram Cap

This is a very simple casting but is also in a prominent location so must look good as well as function properly. I found a soft plastic shower curtain support for the pivot pin screw support. It looks a lot nicer than anything I could have made.



It is certainly a pleasure returning to small flasks. No need for ribs, gagers, or a crane to lift the flask.

Since this casting does not use much aluminum, I also rammed up my pattern for an angle plate. It turned out that the vertical part of the pattern did not have any draft. When I tried to draw the pattern, the sand held it firmly. After much wiggling, I did pull it out but the void was a mess. In the spirit of nothing to loose and something to learn, I went ahead and used it.



The gate and sprue are part of the pattern.



The part looks fairly good from this angle...



Here you see the real story. It looks terrible here yet I think I can machine it into a useful angle plate. The vertical part of the pattern now has a lot more draft. The next time I have spare capacity, I'll give it another try.

Most of the furnace cycles today were used to produce ingots.

Last week I had the great luck to find a commercial muffin tin at a resale shop. At least it might have been for muffins but each depression is around 3" in diameter and 3/4" deep. There is also a nice lip around all 24 of the depressions. That does a nice job of containing any overflow. Best of all, the tin is coated in some really fancy non-stick material. Molten aluminum does not effect it but the ingots just fall out.



Each ingot weighs about 6 oz. My hope is that I can stack more of these round ingots into my steel pipe crucible than was possible with the muffin size. Furthermore, this new tin can hold $24 \times 6 \text{ oz} = 144 \text{ oz}$ which is more than the safe capacity of my crucible. So in the event that I must dump my entire charge, it will all fit here. Not bad for \$5.



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