



Balcones Forge Dispatch

President's Corner

November 2021



Greetings!

Ah, fall! It's now my favorite time of year with a little crispness in the air that makes you say "I'll think I'll go out and light a fire." This is the time to start working on all those Christmas gifts and the other things you

saw and wanted to make during the summer but it was just too hot to hammer. Crank up the forge!

Have you noticed your welding skills just aren't as good as they used to be? As we age and our eyesight starts to decline and we move into bifocals or trifocals, we don't seem to notice any differences until we put on that welding helmet. It is almost impossible to tilt your head and find the right magnification when you are looking thru the small lens in the hood and now your weld looks like it came out of a toothpaste tube. Solution: buy yourself a pair of single strength reading glasses and keep them by your welder. Most of us keep our head close to our work, usually 12"-18". Try to find a pair of glasses that makes print look rather large at this distance and give them a try. Worked wonders for me.

We had a wonderful time in October at Doug Corselli's Blackhawk Mill & Metalworks in Zorn. Hailey Woodward worked on the big hammer while Terry Estes and Tom Leinning made some interesting pieces on the flypress. Tim Tellander worked with some younger smiths to hone their knife making skills. Forged In Fire winners Tobin Nieto, James Helm and Alex Ruiz were also on hand to hand forge some blades and talked to the crowd. Rudy Billings was on hand to tell folks about Balcones Forge signed up several new members. Good job Rudy! A big thank you goes out to Doug for opening up and rearranging his shop for this event and letting us use his forges and big boy air hammers. This was quite a show!

Meeting is on November 13

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COULD BE YOU!!!!!!



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The November meeting will be on the 13th at Jerry Whitley's Rustyk Forge in Devine. This will be 9th Memorial meeting. Jerry has Henry Vera lined up to do a tong making demo so bring your cameras and note pads. Competition trade item - a flower that will be judged and added to a bouquet which will be auctioned. Bring a chair and your favorite beverage and something for the auction. Prize for the best. More to follow. Google Maps info: 295 CR 663, Devine, TX 78016 and 210-288-3961 – Jerry's cell. Meeting starts at 9am.

This meeting is the largest of the year and the auction always brings in enough money to get us thru the year. We are counting on your donations and purchases to make this year's event a big success. Bring us your hand forged item as well as your unwanted tools, books or any material that another smith might want. We never know what will show up.

No meeting plans for December.

Heads up: the January meeting will be at the Texas Blacksmithing Conference on January 29th in La Grange at 250 West Fair Grounds Rd. 78943. This event will support the Texas Czech Heritage & Cultural Center in La Grange. Lots things to see here. Facebook: The Texas Blacksmithing Conference.

Time to start making plans for the 2022 ABANA conference in Denton, Texas May 11th – 14th. Check the web site for details: <https://abana.org/2022-abana-conference/> .

Balcones Forge call for help. We are looking for a few good hardworking people to help with the monthly activities like preparing meetings sites and materials for meetings and cleaning up after the events as well as taking over some the board vacancies. Some of our folks have just become too busy or just too damn old to carry on and need a well-deserved break. If you would like to help please give me a call at 210-842-3049 or email me at treefarm@swbell.net or contact one of the

other board members. We are in need of a librarian to fill the vacancy left matt when he relocated to the north country. Matt did a great job and we sure miss him.

And finally from the 2000 Fall edition of the Texas Forge Review (TABA) by Hollis Wooldridge . . .

One Sunday morning, the pastor noticed little Alex was staring up at the large plaque that hung in the foyer of the church. It was covered with names, and small American flags that were mounted on either side of it.

The seven-year old had been staring at the plaque for some time, so the pastor walked up, stood beside the boy, and said quietly, "Good morning, Alex".

"Good morning pastor," replied the young man, still focused on the plaque. "Pastor O'Reilly, what is this? Alex asked.

"Well, son, it's a memorial to all the men and women who died in the service."

Soberly, they stood together, staring at the large plaque.

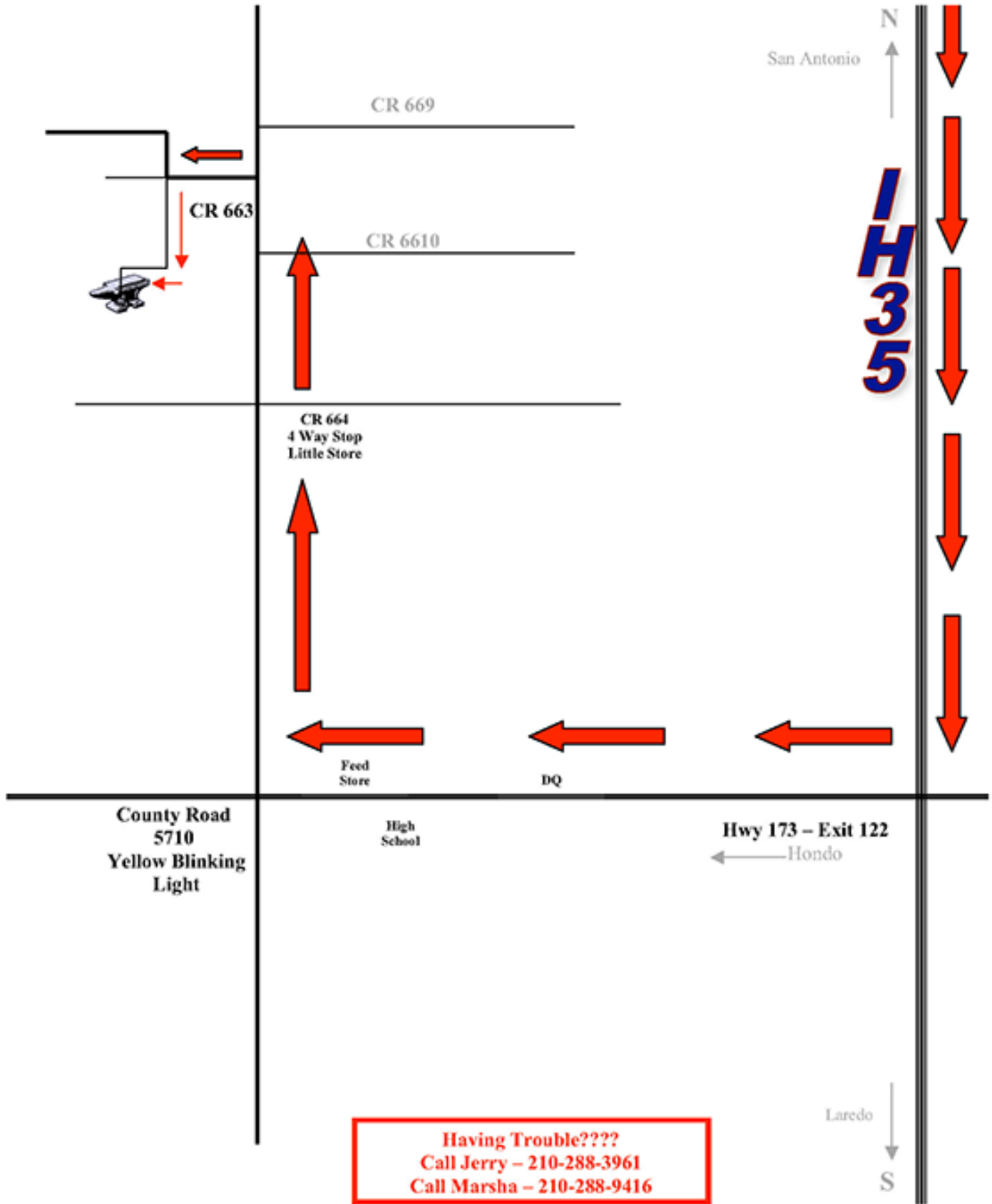
Little Alex's voice was barely audible when he asked, "Which one? The 9:00 or the 10:30?"

See ya'll in Devine.

Jerry Achterberg – Pres. Balcones Forge

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October ABANA Affiliates Newsletter

Hello Affiliates and friends,

What a busy month October has been... Iron to Art Festival has wrapped up with a resounding success, despite almost being rained out, the demonstrators and crowds alike had a soggy good time. Thank you to all Affiliates that attended, demonstrated and chatted with us in Johnstown, PA. A huge thank you to the set up and tear down crew and to everyone else involved in making this a memory that will be chatted about for years to come.

We at ABANA have recently finished our AGM and have a few new faces on the Board of Directors and have re aligned our committees both of which will be posted on our web site shortly. Speaking of web-site, please take the time to head over to our site abana.org and navigate our new look and structure, trying to make the navigation easier and more user friendly for people to view.

With Halloween approaching there will be many little ghosts and goblins heading out for a fun time and we should take our time commuting when this spooky day comes. As like when you're working in the shop, take your time and not rush. When rushing starts, so do mistakes and accidents. A wise foreman once told me "plan the work, and work the plan" and truer words have not been spoken.

We have a logo for a sticker in the works and hopefully some ABANA Affiliate branded clothing possibly to be available in the next while on the ABANA.org website, under SHOP. We would like to hear from you, do we like the Affiliate logo? Do we brand it onto shirts? Do we make stickers? Let us know, email ABANA Affiliate at ironcloverforge@gmail.com and let us know what you think



PROJECT NOTES—SIDE DRAFT CHIMNEY

Author: Chad Gagnon, Crescent City. Reprinted with permission from the February 2015 newsletter of the Saltfork Craftsmen, the Oklahoma ABANA affiliate. Originally published in the September/October 2014 issue of the newsletter of the California Blacksmith.

When he was here for a Hammer-In last summer, Rod Plew told me I should write up my coal forge side-draft chimney. I've been very happy with it ever since I designed and built it several years ago, so here goes.

I needed a good way to get smoke out of my shop but didn't want to lock myself in to a brick chimney forge. So I went online and found as many designs as I could for a sheet metal chimney, trying to understand the principles of a good chimney design and any critical design parameters that needed to be followed.

I found about three or four write-ups that seemed to make sense and were pretty much in agreement, and a couple that just didn't make as much sense. So I decided to distill the nuts and bolts of those three or four, and came up with a design I knew I could make with a cutting torch and a MIG welder. A brake would have been nice, but alas.

A first principle is that the flue needs to be as large as possible, minimum 8", but preferably 12" or even 14". You're not dealing with a clean-burning, efficient, closed box home fireplace, but a relatively small, cool, and very smoky, open fire, so you need a big draw. Also, the top of the flue needs to extend at least 4' higher than the roof peak, to prevent any errant breeze from blowing down into the flue. Chimney code only calls for 3', but for optimum draw, it should be taller.

I chose a 10" pipe because it was the largest I could find at the local junker. He had plenty of it, and it was cheap. So I had no problem going high enough for a good draw.

Now for the design parameters for the chimney box. First, I needed to build in a smoke shelf and second, there are three measurements that need to be close to the same:

1. The area of the smoke inlet at the front of the chimney by the fire pot.
2. The cross sectional area of the throat created by the smoke shelf
3. The cross section of the flue



4. *Editor's note: I have also read that you need to make sure that, if you install a chimney cap to prevent rain coming down the flue, you need to make sure the area of the downwind side of the cap opening is the same as the flue cross section as well.*

My feeling is that the smoke shelf is the essential component. It's sizing is critical to make this work. If all three are the same, the thing should work like a charm. This seems to be the key factor, along with a tall, large flue.

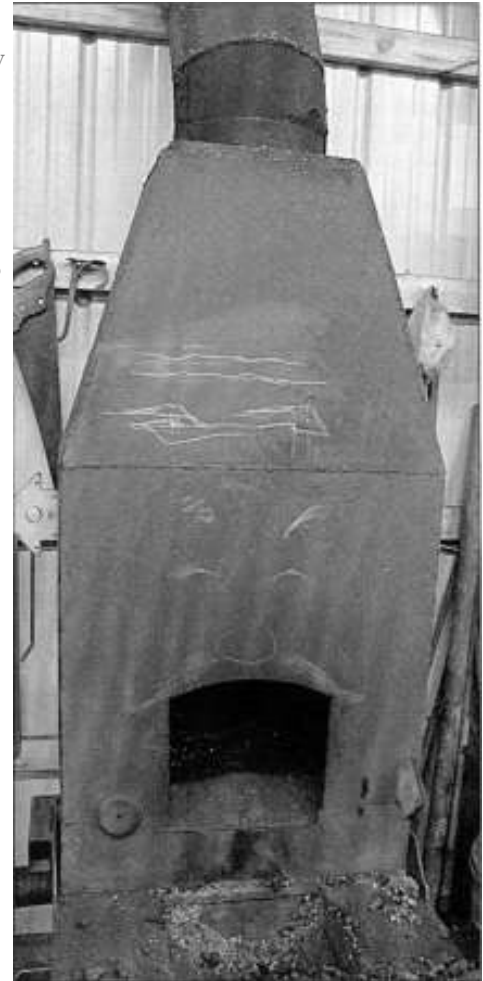
I started with my 10" flue pipe, which has a cross sectional area of about 75 square inches (πr^2) or approximately 3×5^2 . It was a given that the other two dimensions had to match. So, working backwards from the flue, the throat of the chimney must also be about 75" sq. Since my forge is 24" wide at the fire pot, I wanted the chimney box that wide. $75 \text{ sq} / 24" = 3\text{-}1/8"$ for the throat depth.

And a chimney inlet of about 10" diameter seemed about right. So there were my parameters.

Using $1/8"$ sheet steel, I started building a box 24" wide x 24" tall x 12" deep, with back and sides extending up 20" more, narrowing as shown in the drawing. The bottom, front, and top were left open until I could weld in the false back that angled up from the back corner up to $3\text{-}1/8"$ back from the top front corner.. This was made from thinner sheet that I had around, as was the smoke shelf itself. See the side photo for the soapstone-drawn side view of the false back and smoke shelf.

As you can see from the drawing, the smoke shelf is concave along its width, forming a kind of long trough. One article I read said this shape curls and redirects any cool air trying to come down, back in an upward direction. I'm not sure if that really works, but it wasn't difficult to do, and I'm happy with the result.

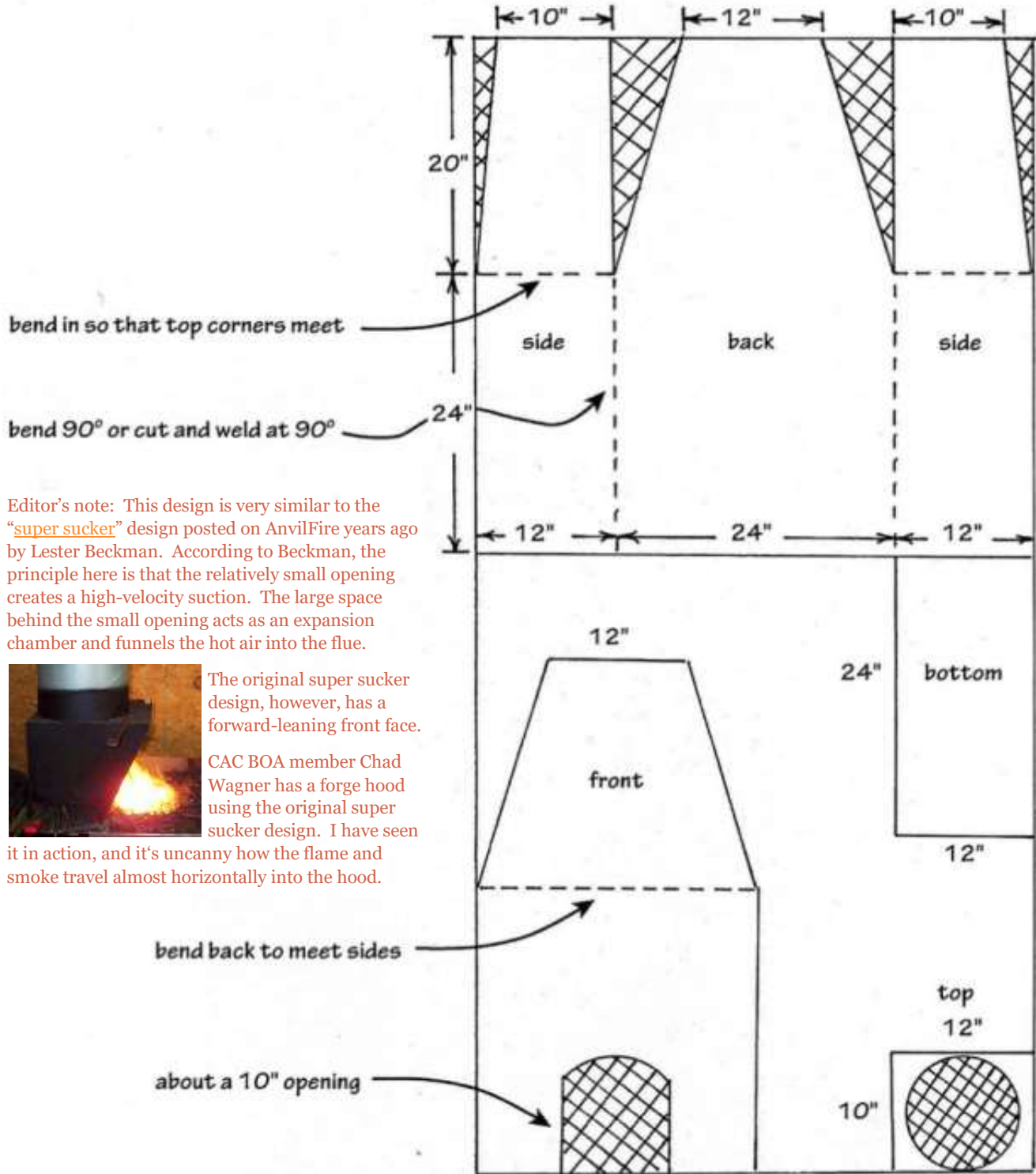
Once the false back and smoke shelf were in, the bottom was added and the front was welded on. Note how the top 30" of the front and sides are bent inward as they narrow up to 12" wide at the top, by 10" deep. The back has no bends, but remains vertical. A 10" by 12" flat top with



a 10" round hole was welded to the top, completing the box itself. To attach the flue, I welded on a 2" tall ring.

I welded mounting hardware onto the back of the chimney box to hold it in position over my forge and ran the flue up through the roof. Because of the flue's height, I added some rebar braces from the roof to the upper portion of the flue and added a cap.

When I start a fire, I always throw some crumpled paper into the chimney and light it a short while before actually lighting the coal fire. Helps get the fire started and minimize the smoke in the room. But it's really impressive how well the chimney sucks the fire and smoke sideways almost immediately. And after that, the shop is smoke-free. Hope this helps anyone looking for a good design.



Editor's note: This design is very similar to the "super sucker" design posted on AnvilFire years ago by Lester Beckman. According to Beckman, the principle here is that the relatively small opening creates a high-velocity suction. The large space behind the small opening acts as an expansion chamber and funnels the hot air into the flue.



The original super sucker design, however, has a forward-leaning front face.

CAC BOA member Chad Wagner has a forge hood using the original super sucker design. I have seen

it in action, and it's uncanny how the flame and smoke travel almost horizontally into the hood.

Editor's Soapbox

You will notice there are no pictures or notes from last month's meeting. Why, you might ask? Because no one sent any! I can not be at every meeting to take pictures....but I bet some were taken.....so send them my way; you will even get a photo credit.

Restarting this group will require work from all the members, not just the old guard.

November is the election meeting. Time for some change? Up to you.

BTW, I won't be at this one either.....somebody take some notes!

Vince Herod
Editor

