STRAIGHT BAR SHOE DELIVERS NEW CHALLENGE

For this year's Summit Mail-In Exercise, the goal is to test your skills with a practical shoe with applications for any footcare practice

By Craig Trnka, CJF

A perception among some people about competition shoes is that there seldom is a practical use for certain shoes on this list. Take a roadster hind for example. Yes, I agree very few farriers we come across in the United States will ever find a need to nail one on a foot. But it is the lessons learned during the process of making that shoe that transfer to the farrier's everyday work.

So for the fourth annual Summit Mail-In Forging Exercise, sponsored by VICTORY, I wanted to offer a shoe that would have plenty of lessons, as well as a practical use. Some may think that this is an easy exercise. However, there are plenty of challenges in this shoe, especially with the toe.

If you start this shoe in September and struggle, hang tight. We'll do a Facebook Live session in mid-October. Keep tuned to this on the Facebook pages of *American Farriers Journal* and World Championship Blacksmiths.

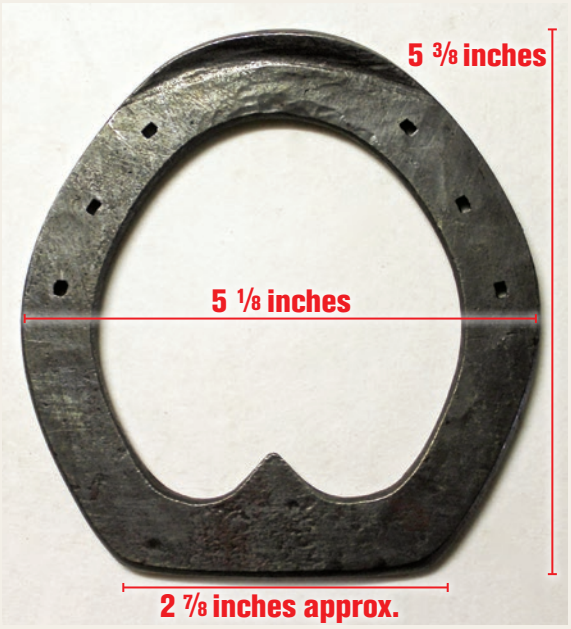
More On The Shoe

The shoe measures 5 ⅛ inches wide by 5 ⅜ inches long. The bar is approximately 2 ⅞ inches wide. I say "approximately" because there is not an exact corner to go by. The rocker or set toe goes from toe nail to toe nail. The frog plate is 1 3⁄16-inch from the back of the bar to the tip. The boxing is from heel nail to heel nail around the back of the shoe. It is fitted up with six E3 nails, with just the crown of the nail head exposed.

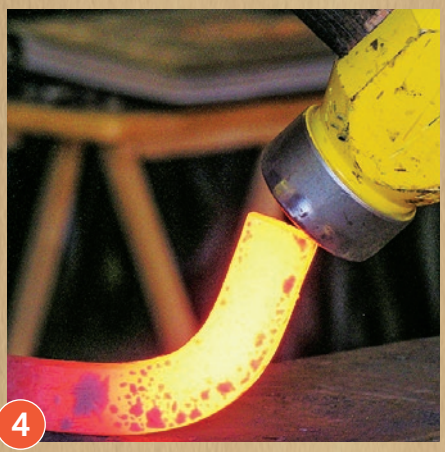
My son Bodie Trnka and I will judge these shoes at the Summit. If you attend, feel free after the contest to stop by our World Championship Blacksmiths booth at the trade show for any critiques of your shoe. But you don't need to attend to enter this challenge.

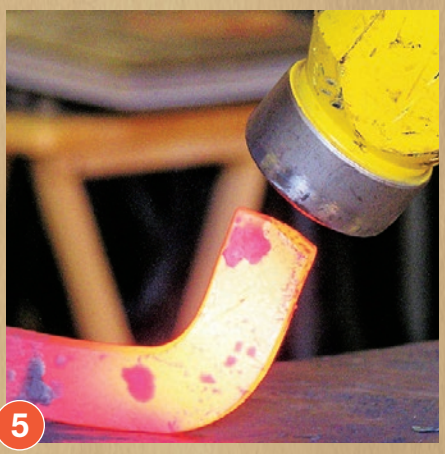
I know you'll find a lot of helpful things in this shoe that will help you with your everyday work. Think it's easy? Let's see you do it then. You'll improve your skills and earn a free T-shirt from VICTORY just for entering. You may win the buckle. But remember, with any contest, it isn't about winning — it is about the journey. Good luck with this challenge.

Craig Trnka is the founder of the World Championship Blacksmiths, a past president of the American Farrier's Association and a member of the International Horseshoeing Hall Of Fame.



Sponsored by VICTORY, this forging exercise requires making a straight bar shoe. You have until Jan. 18, 2018, to mail your entry into the AFJ office. Read instructions on how to enter on Page 70.





Step-By-Step

1. I started with 15 inches of 5⁄16-inch by ¾-inch stock. We'll start with the toe bend. After bumping one heat and putting approximately ¾ of an inch into the toe, I made a nice tight hind toe bend.

2. When you initially make the bend for the hockey stick, you want to find the soft surface of the horn so as not to score or ding the metal.

3. Once you have made your sharp bend for the heel (hockey stick), the inside edge of the steel will buckle or swell. Make sure you flatten this area so as to not lose width in the heel area.

4. When setting the hockey stick down, draw the hammer toward you and aim for your feet. You will avoid the corner filling with mass by letting the material fall away.

5. As you hit the end of the material, it is important not to lift up on the branch as this will allow material to slip around the corner of the hockey stick as well.

6. Once a corner starts to form, the back edge of the material will get a hump in it or a slight arch.

7. To remove this arch in the back of the bar, place the end of the hockey stick on the tip of the horn. With just a little bit of daylight, hit in between the end and the corner that you are fabricating. This will straighten the bar so you can upset more material into the hockey stick if you think you will need it.

8. The next step requires that you have both hockey sticks made, with the two joined up and ready to weld. If you are right-handed, make sure to have the left branch over the right branch when the toe of the shoe is being held by your tongs. If you are left-handed, do the opposite. This will allow you to drag the hammer toward you and pull the weld together. If you have a sufficient welding technique, then just proceed with your plan.

9. Setting up for the frog plate will help if you do it before your initial weld. With a bit

of daylight between the inside edge of the bar and the horn, hit the back of the bar and push the edge of the scarf over the opposing scarf. Flip the shoe around and repeat the same process for the opposing branch.

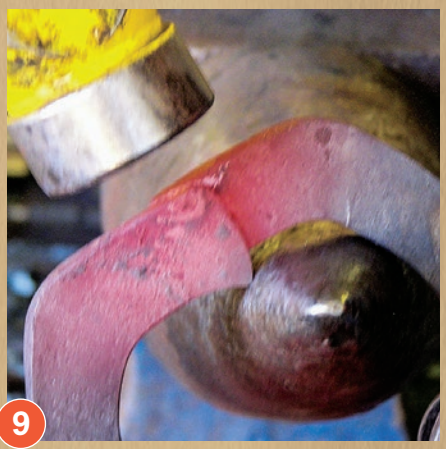
10. With the tips lined up for the frog plate, you now are ready to weld. Get a little bit of color on your welding area before you flux it. This will allow the flux to stick and get the metal up to temperature before the flux cooks off. Coke forges get a bit too hot for good welding. With gas forges, you just need to be patient and wait for the flux to start moving before you pull it out and start welding. Remember several light hits work better than one giant whollop.

11a and 11b. When welding it is obviously easier to hit on the flat of the stock as it is to hit the edge. Make sure you get the back edge forged back in. I like to hit on the diagonal so as it doesn't make a sharp back corner at first. This will be the first place a scarf will start to let loose. If you hit the back edge down at an angle it thickens the welding area and offers more material to weld on the flat.

12. As you are taking a few welding heats, use the round side of your hammer and set down your frog plate. This will make the frog area of the bar grow, giving that area of the shoe more surface contact for the frog.

13. Shaping the back half of the shoe while you are welding is usually best. The horn does the forging on the inside of the bar as the hammer shapes and forges the outside edge of the bar. Using the frog plate to rest on the horn, you can put more arch in the branch – or take shape out of the branch.

14. Once the bar is welded you can use the strength of the shoe and the fact that it is one solid piece to your advantage. Staying away from the widest part of the shoe, you can move your quarters up and down on the shoe just by hitting it on the diagonals. If you want to move both quarters forward, you can pinch it against the anvil and use your hammer to move them forward, or vice versa to move them back.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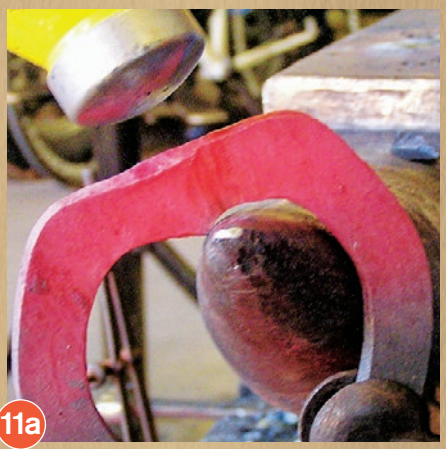
11a


11b


12


13


14


15

16a

16b

15. Once you have a shape that is nice and elliptical, line up your bar and toe on the anvil and use it as a square to draw a clean line at the back edge of the web. Take your time and mark your nails when the shoe is cold (this is the most important part). Place a nail hole behind the back edge of the toe bend, at the widest part of the shoe, and split the difference. The nails will ideally exit center of stock.

16a and 16b. Once you have your nail holes punched and you have reworked your edges so the shoe is elliptical, it is time to put a set toe on it. Put the shoe on the edge of the anvil where you are just past the toe nail. Hit the edge and rotate the shoe just a tad and hit it again. The shoe will pull itself onto the face as you hit. It will take some practice, but after awhile you will get the hang of it. I suppose it isn't too different from rubbing your stomach and patting your head. I like to put this arch on my set toes in everyday shoeing because it softens the leading edge without making a sharp corner. I have found that a rocker toe that is straight usually wears off in the corner first. I like to reset shoes and this gives the shoe a bit more life in the toe.

THE JUDGING CRITERIA

Here are some of the shoe's aspects that we are going to focus on as judges, in order of importance:

- Nails down the center of the stock.
- No nail behind the widest part of the shoe.
- Nail fit.
- Width of shoe.
- Width of bar (that it fits into the Golden Mean).
- Length of shoe.
- The flatness of the shoe.

HOW TO ENTER

Step 1: Make the shoe as described by Craig Trnka.

Step 2: Obtain and complete the entry form at americanfarriers.com/summitshoe. If you are unable to download the form, contact *American Farriers Journal* at 262-782-4480 to request a form to be sent in the mail.

Step 3: Send in the completed form and your shoe. If you won't attend the IHCS, mail this entry form and your straight bar shoe to *American Farriers Journal*, Summit Mail-In Forging Exercise, 16655 W. Wisconsin Ave., Brookfield, WI 53045.
Your entry must be received by Jan. 18, 2018.

If you are entering from outside the U.S., DO NOT assign a value to your shoe on the customs declaration form.

If you are attending the IHCS, drop off your entry form and straight bar shoe in the Duke Energy Center near the **IHCS registration area by 5 p.m., Jan. 23, 2018.**

Step 4: Each contestant will receive a free commemorative T-shirt. The top finisher will earn a belt buckle and 2019 IHCS registration.

T-shirts will be mailed by March 1, 2018, and immediately given to those submitting a shoe at the Summit. All shoes not picked up at the IHCS will not be returned.

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