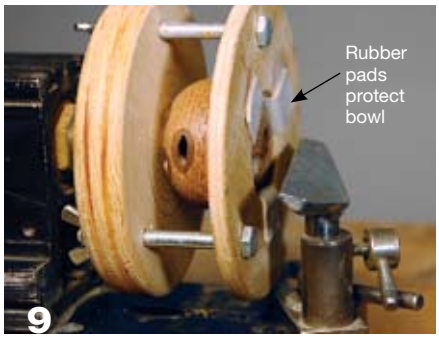
To center the piece on the chuck, use a pencil to find the high point of the bowl. Loosen the wing nuts, push from the center of the penciled length, and tighten the nuts.

At his studio in Hawaii, AAW member Kelly Dunn details the bottom of a bowl with a homemade 36"-diameter Straka chuck on his bowl lathe.



The Straka chuck can be miniaturized for small work. The 4½"-diameter chuck is used to hollow both ends of a Christmas tree ornament's bulb on a mini lathe.

By using a short section of thick-walled Schedule 40 PVC, you can turn the bottom of natural-edged bowls with the Straka chuck. With both ends squared, the pipe sets about ½" into the base.

well as the shape of the bowl, which may be the real deciding factor. If you grip the bowl in the midpoint or even closer to the rim, this gives a lot of open area to work on the base. Lay the selected ring over the bowl, being sure to line up the keys on the base and ring (**Photo 6**).

Next, determine what length of bolt is required. I place a washer below the head of the bolt (these go through the ring from the outside) and a washer on the backside of the base where the wing nut will draw the bowl down against the base. Put the bolts, washers, and wing nuts through the ring and base, but leave the wing nuts slightly loose at this time. The bolts should be just long enough to go through the chuck holding the bowl, washers, and wing nuts.

Place the chuck with bowl on the lathe. How well is the piece centered? By just turning the lathe by hand, you'll quickly see if the piece is centered. I turn the piece by hand, use a pencil on the tool rest, and find the "high spot" (**Photo 7**). Next, lightly tap on this spot, then check again with the pencil to see if the piece is centered. When centered, the pencil line goes around the bowl continuously. The trick is to have the bowl clamped tightly enough to hold the bowl in position while centering, but loose enough to make small corrections by tapping.

When satisfied with the centering, tighten the wing nuts firmly. Be careful to not overtighten, especially with thin-walled pieces.

Turn the base to the desired shape, details, and diameter, and remove all screw holes or chuck marks. Remember, this system is only for the lower portions and underside of the bowl or vessel—don't try to come up too high on the bowl or too close to the ring. Sand to complete this area of your piece.

With a little up-front construction time, you have created a versatile reverse-chucking system. It works well on bowls and vessels of differing sizes and shapes. Some turners even use the chuck for closed hollow forms.

The Straka chuck has some limitations on extremely thin work, pieces with uneven tops or rims (such as natural-edged bowls), or delicate pieces (due to voids or structural weak spots) that would not take the clamping action.

Once you learn to use the chuck, you will find it also mounts quickly and holds the piece securely with virtually no chance of pitching the piece off the lathe.

The size of the chuck can be varied for different-size lathes or operations. Hawaiian turner Kelly Dunn uses a 36"-diameter Straka chuck (**Photo 8**). For small work, I regularly use a 4½"-diameter chuck (**Photo 9**) at my Klein lathe.

With a little ingenuity and thick-walled Schedule 40 PVC pipe (cut square on the ends), you can even modify the Straka chuck to accept natural-rimmed bowls (**Photo 10**). After you cut a recess in the chuck base to match the outside diameter of the PVC and pad the PVC, turn a base or foot as you desire.

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