Reshaping Torch Parts

There have been many instances where I purchased a torch and the muzzle end of the burner was either bent in or somehow pressed into an oval shape. I have also purchased many Bernz torches with a brass wind shield (guard) that was very misshapen. These Shields are very thin and soft and tend to get beat up.

To reshape these parts I use sockets from a mechanics socket wrench set. The sockets in these sets come in many shapes and sizes. Some are tapered and have a shoulder. Sockets with shoulders work the best for reshaping the hole at the end of the burner. Find a socket where the small end fits into the hole but the shoulder is wider than the diameter that the hole should be. Tap the socket in using a rubber faced hammer. The socket will push the burner back into shape. Eventually, the tapered portion of the socket will come into contact with every part of the inner surface of the end of the burner. At this point the muzzle end of the burner is perfectly round. I use a rubber hammer because I think it is a bit gentler and makes it easier to control the process. This isn't about muscling it back into shape. it's about easing it back into shape. Brass and bronze can be brittle at times and a sudden smash could split it. If the burner is really smashed in, you may have to use two different size sockets. Start with a smaller one and work up to one that is the correct size.

Sockets that are straight on the sides work well for reshaping wind shields. The socket I used in this example is used for spark plugs, it's a perfect size. Find a socket that has the same diameter as the inside of the desired finished shield. These shields bend easily. Push the socket inside the shield and use it as an anvil. Use a rubber hammer to gently hammer it back into shape. Do not use a metal hammer, it will make many little flat spots on the surface. The wider the surface of the hammer head, the better. Keep hammering (gently) until you are happy with the shape of the shield. I have also used smaller sockets to remove dents in pump cylinders. Just find a socket that fits perfectly inside the cylinder and tap it down.

In the past I have done a lot of work on cars. As a result, I have a large selection of sockets and wrenches. To do the things above you just need a socket wrench extension (see picture) and the correct sockets. The sockets can be bought individually in auto stores or Sears. You need not have a vast assortment.