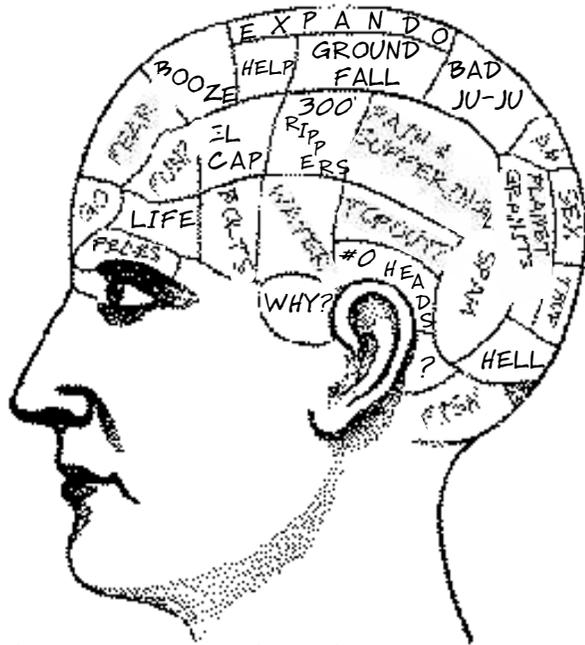


# FISH

## HEADMASTER KIT



### TOOLS AND INSTRUCTIONS FOR MANIACS

**Congratulations! You have just purchased a set of wall tools that only a truly sick person would need or want. Hopefully you already have some idea about what copperheads are and how to use them. If not, either get some practice, or continue reading, underliner in hand.**

Ok, here we go. A spot of history: Copperheads were invented by Bill Forrest. The soft copper heads were supposed to grip better in cracks, when used as a conventional nut. But, next thing you know, wall climbing deviants are pounding on these soft "heads" and making them stick just about anywhere. Voila! Hard aid was born. Enough with the history lesson, let's get to pasting.

You are going to need some heads to practice with, right now. Don't have any heads? Hmmm.....Ok, keep reading, but get some before you go up on a wall. Whipping this pamphlet out during a lead on El Cap would be bad form. Try your magic on the ground first.

In its most elementary form, copperheading is nothing more than forcing a blob of copper into a rock groove. You can go about this like an ape or a surgeon. The headmaster kit will get you pasting like a surgeon in no time.

If you hit the high points of placing each size head first. You'll hear a lot of mumbo jumbo about guys airing it out on #0 heads, certain death below, grim seam above. Don't believe it. The #0 head is a full size smaller than the cable on your Friends. In an ideal situation (no rock rubbing the cable, perfect bond, in a lab) they test out to about 220 lbs. Sure they will work, but in the real world ie: El Cap etc. they are best left at home. Note: All load ratings given are for the cable and sleeve in a perfect world. Once you start to beat on these things, all bets are off. Use the strength numbers as a guide only.

**#1's**— Usually these are made of copper, as aluminum is too soft, and the cable will actually peel out of the head under load. The cable size is 1/16", and goes to 480 lbs. If the placement you are looking at is too small for a number #1 head, that is, more than 1/3 of the head would not fit in the seam, try this: Lay the head flat on the wall, cable folded flat against the wall, and give it a few taps with your hammer. This will flatten the head enough to slip into the seam. For a standard placement, use the smallest punch in your kit. If you have a wire brush, use it to clean the placement area. Size the head with the above method until you get a very tight fit. With the small punch, tap up and down the entire length of the head. It should start to deform into the crack. If it does not deform, and just slips or skids into the placement, it is probably no good. You should remove it and try again. If you think that removing it will destroy the placement, be it damage to the rock or breaking the wire, just punch another head right in on top of the first one. Continue to work the head with the small punch until the feeling you get through the hammer is a solid one, with no moosh. If you missed the head and hit the cable, inspect it carefully, for the chances are the cable will break under load. If you beat on the head too much, cable will show through on the side you are hitting.

That's it, the placement is smoked. Remove this head and place another. The key to #1's is not to beat them too much. Another hot tip for #1's is always place two, mere inches apart, then equalize them with a tieoff. Pseudo bomber!

**#2's**— Usually these are made of copper, but aluminum ones are available. The cable size is 3/32", and goes to 920 lbs.

Ahhh.... the #2 head! This is the most popular size of head on the hard nailups. This head will take a pretty severe beating and still hold out for more. For placing this head you can use the Small Punch, or The Anteater, depending on the placement. For a seam type placement, use the Small Punch to get it started, and then upgrade to a new tool if needed. When using the Small Punch, paste these units with a circular motion until no more copper is going anywhere but outside the seam. Fold any escaped copper back onto itself and then let it be. Pounding on it any more will only weaken the placement.

If the placement is a blown out "V", lay the head into the slot and beat down on it with a wide tool, like the Big Chisel or Anteater Punch. The idea is to force the head into the "V" slot so it can act like a nut, while mooshing enough copper into the surrounding rock to make it stay put. Again, as with all placements, use your wire brush to clean the area of detritus before pasting. Hot tip for #2 heads: If you run out of rivet hangers, just turn the #2 head over and use the clip in loop as a #2 rivet hanger.

**#3's & #4's**— Usually the #3's are made of copper, and the #4's are made from aluminum. The cable size is 1/8", and goes to 1700 lbs.

These are the standard head for the big blown-out trade routes. The #3's are sturdy beasts and can be re-used a few times before retiring them. The #4's are made of aluminum, and for this reason they stick better for the size, but wear out faster. Usually the area you are going to place one of these babies will be easy to see. Clean the placement and then set the head in there with the pointy end of your hammer. Choose a large tool, like the Chisel, and start to paste "X's" up and down the head. This cross hatching should show about 5 of these "X's" on total head body. The next step is to hit the top of the head with the edge of your chisel and watch for any movement. If it moves, repeat the first steps. If it does not move, try the same thing on the bottom of the head. No movement? Good. If you see dust or rock appear at the bottom of the head while rocking it with the chisel, this is also a warning sign. Repeat step one. Ideally the head will fill every little feature in the placement. If you know there is a constriction or lip or anything that might increase the holding power, use it. Remember where it is, then force the head around, through, or over this area. Remember, you are a surgeon, not some goon just haphazardly hitting away on a blob of copper 2000 feet up in the sky.

**#5's & #6's**— Usually these are made of aluminum. The cable size is 5/32", and goes to 2600 lbs.

Baboom! Bring on the artillery. These monster heads are rarely used, but can also be just the ticket for that special placement. Usually these will go in some destroyed pin scar or weird pocket. On these guys your surgeons touch will be forceful and firm, yet cautious and direct, kinda like CPR on a rhino. Get the head to stick in the placement with the blunt end of your hammer. Remember all the points from above and apply them here. My personal choice is the Big Dull Chisel for this job. A Punch has the tendency to punch right through the aluminum without forcing enough of it into the placement. Don't be too shy about pounding on these larger heads. The extra force is needed to get the aluminum to flow into the placement.

#### Headmaster Top Ten Rules :

1. Don't be an idiot and ruin placements by trying to clean heads until the cable breaks.
2. Heads placed on top of old heads will work, but are to be avoided.
3. Fixed heads are always suspect. Test them thoroughly before loading.
4. If there is old copper in the placement (see what the idiot did in rule #1) use the Sharp Chisel to get it out. Here's how: Slice the copper right down the middle, then fold the sides in toward the center. This usually does the trick. If it seems hopeless, at least get the cable out of the old copper and then paste yours right on top of the old one, fingers crossed.
5. Never use the chisel or any of these tools to enhance the placement. For openers it's ruining the rock and is definitely the trademark of a wuss and ball-less coward. Scraping and cleaning is one thing, but outright chiseling a placement is intolerable.
6. Use circleheads (copperheads formed into a loop) for placements in horizontal seams or roofs. The design makes the pull equalized from both sides of the head, instead of it trying to peel a regular head out of the placement.
7. Use a Cool Jerk or similar device to clean heads. A biner chain also will work. Be wary while using these for they are capable of generating a whopping force, thus putting you up there with rule #1.
8. Always try to place a piton or nut first. Filling up pin scars with copper is not cool. After all, these routes are not self healing. You will ruin a placement forever unless you are careful and honest about your abilities.
9. Wear safety glasses while heading. Rock chips, chisel shards, etc. are hard on the eyes.
10. Confused? Practice, Practice, Practice. Then call us for more info.

Ok, there's the basics of advanced heading. The key to all this stuff is to get out there and practice. Take a buddy out and play the game of "who can make it stick" or "pop a piece and buy a round". Experiment with the most ludicrous placements you can find. More of them will hold than you think. Try out new ways of combining heads pinned in with pitons (a very sneaky weapon against hard aid), or equalized heads, or ? Go out and try it.  
Happy Pasting!

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Ps. These tools are sharp and can kill or maim. Use your best judgement.