

Pocket-Sized Fishing Rod and Reel

by [Toglefritz](#) on July 2, 2009

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Intro: Pocket-Sized Fishing Rod and Reel

I love to go fishing, it is fun, and it can be very exciting; one can go fishing with a group of friends or the family. Whether you are camping, or just on a day trip, fishing is a great way to pass the time. As Doug Larson said, "If people concentrated on the really important things in life, there'd be a shortage of fishing poles." However, conventional fishing poles are long, fragile, and hard to carry, or otherwise transport. This Instructable will show you how to construct a fishing pole, complete with a reel, that will fit nicely in your pocket. You can keep it handy, and go fishing any time water is nearby.



step 1: Materials

These are the materials you will need for your fishing pole:

- A Telescoping Radio Antenna - *This will be used for the pole part of the pole*
- A Pen - *One of the cheap kind you get for free at hotels or wherever*
- A Small Binder Clip - *The smallest one you can find that will clip over the barrel of the pen*
- Three Very Small Washers - *Again, smaller is better*
- Some Thin Wire - *The length is not important, this will be used just to attach stuff*
- One Thin Bolt - *This should be as long as the distance between the handles on the binder clip and thin enough to fit through the holes in the...*
- Four Medium Sized Washers - *Large enough to cover the round parts on the top of each binder clip handle*
- Two Nuts - *Square nuts are better than hex nuts, but hex nuts will work fine. These must screw onto the bolt.*
- One Small Nail - *Any short, fairly thick piece of metal will work, however*
- Super Glue - *Obviously, this is used to attach things*
- Hot Melt Glue - *This is used to attach parts to other parts as well*
- Fishing Line - *A very critical part for any fishing pole*
- A Swivel - *A small, rotating metal clip used to attach the hook*
- A Hook - *Used to catch the fish*
- *Optional: A Worm*

If this list is a tiny bit confusing, take a look at the pictures , they are worth 1000 words each.



Image Notes
1. Two Nuts

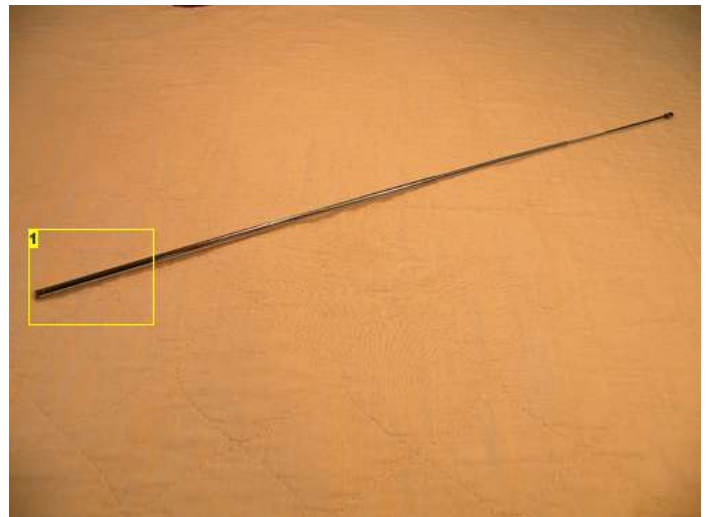


Image Notes
1. A Telescoping Antenna



Image Notes
1. A Pen

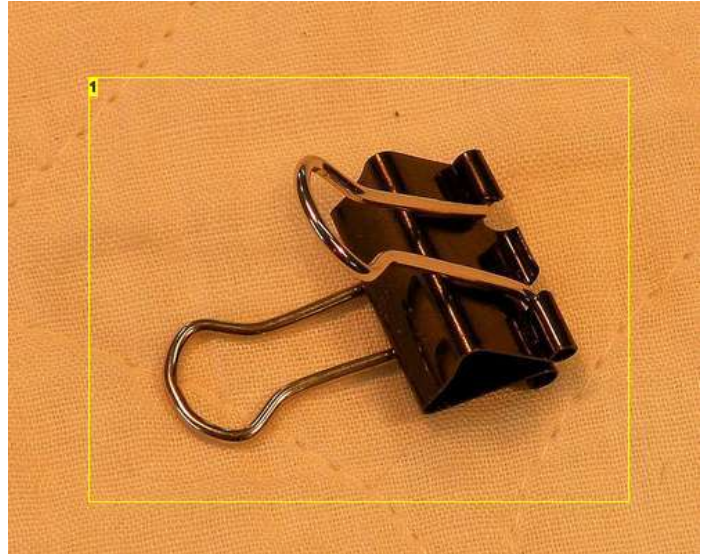


Image Notes
1. A Small Binder Clip

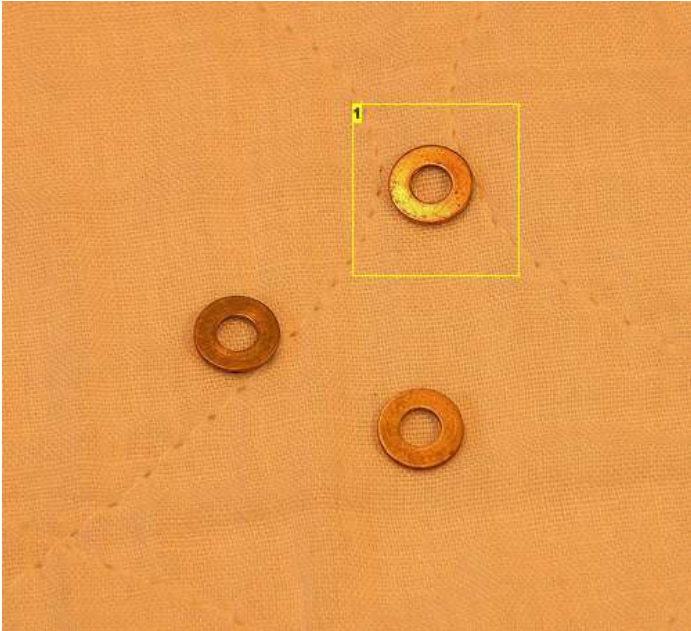


Image Notes
1. One of Three Very Small Washers

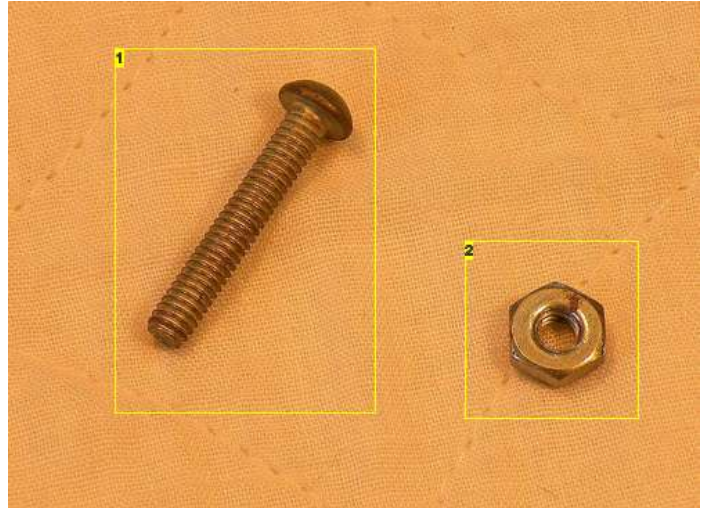


Image Notes
1. A Bolt
2. A Nut That Fits that Bolt



Image Notes

1. One of Four Larger Washers (~.75" in diameter)

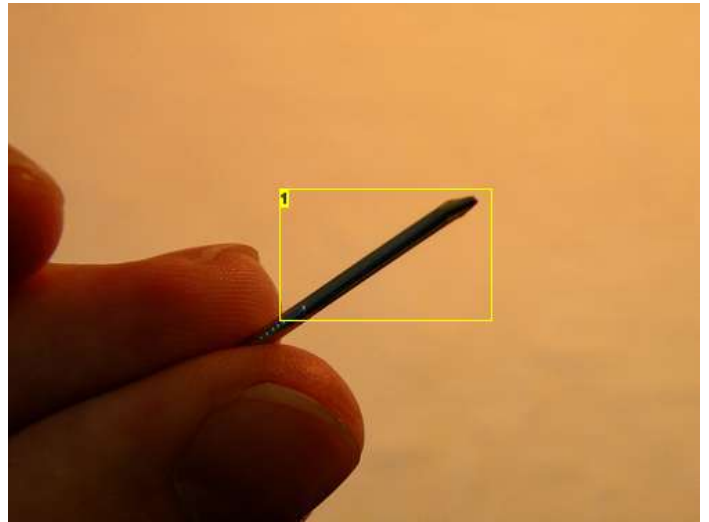


Image Notes

1. A Small Nail



Image Notes

1. Super Glue



Image Notes

1. A Swivel

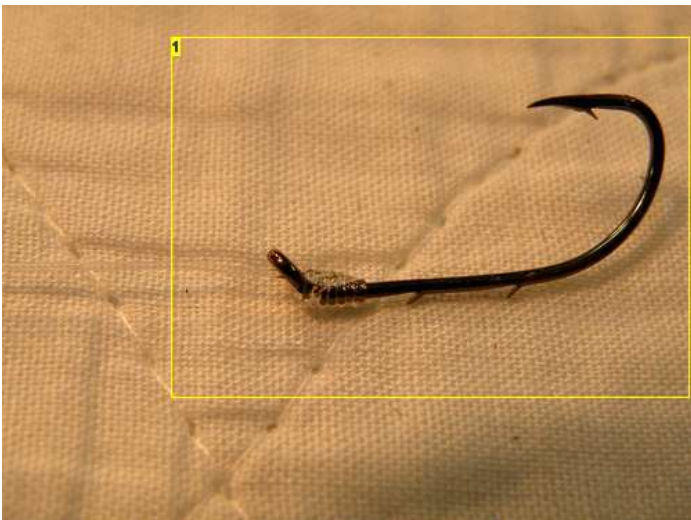


Image Notes

1. A Snelled Hook (A fishing hook that is attached to a short length of fishing line with a loop on one end. It is used to attach to a swivel.)



step 2: Handle/Reel Mount

The pen will be used as the handle for your pole, and the reel will be attached to it as well. However, it is not necessary to write on the fish you will be catching, so remove the tip, ink tube and cap. Simply take off the cap and pull the tip until it pops out of the body of the pen. If it is a little stubborn, use a pliers. The only part we are interested in is the bigger tube.

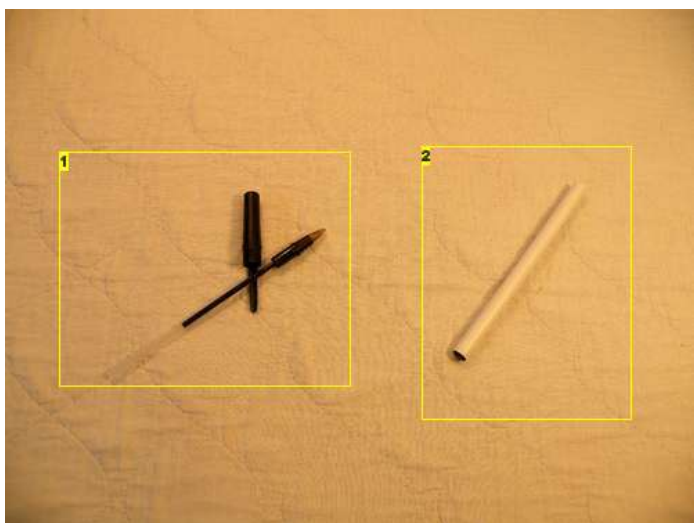


Image Notes

1. We do not need these...
2. We do need this.

step 3: Attaching the Pole to the Handle

Now we are going to glue the antenna inside the body of the pen. First, stand the pen body vertically in a vice or clamp with the open end up. Second, inject some hot glue into the tube and quickly push the antenna into the tube. Next, put some additional hot glue at the opening of the tube to ensure that the antenna is securely held in place. Last, get rid of all those extremely annoying hot glue spider webs.



Image Notes

1. Filling the tube with hot glue

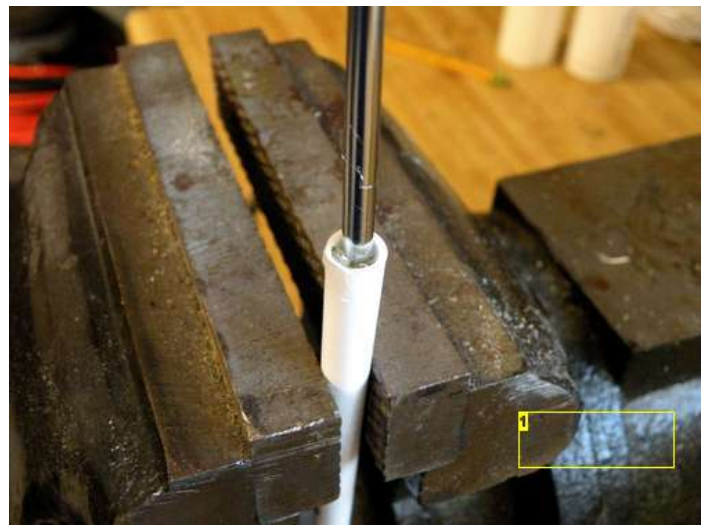


Image Notes

1. Inserting the antenna

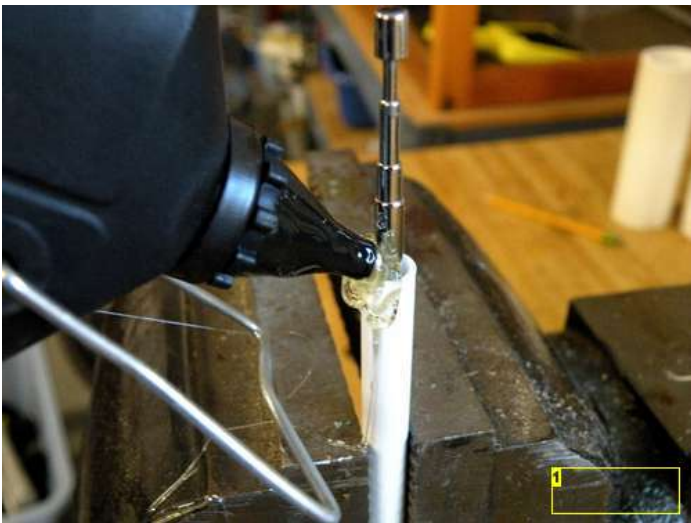


Image Notes

1. Reinforcing



step 4: Attaching the Line Guides

If you take a look at a regularly sized fishing pole, you should notice that the fishing line is guided from the reel at one end of the pole, to the opposite end, by several metal circles through which the line passes. The three very small washers will serve as these rings on our Pocket-sized Fishing Pole. This step is a bit tricky - you will wish you had significantly more than just two hands.

First, put a section of wire through the washer and fold the wire in half so that the washer is in the bottom of the V shape formed. Second, twist the wire tightly to hold the washer in place. Third, use the two straight ends of the wire to wrap around the antenna and the washer to hold the washer in place atop the pole. Finally, put some super glue on this joint to permanently attach the washer - **Be very careful not to permanently attach yourself to anything**. Repeat this step for the other two washers. Attach one washer to the end of each section of the antenna.



Image Notes

1. The wire is bent and twisted in order to hold one of the small washers.

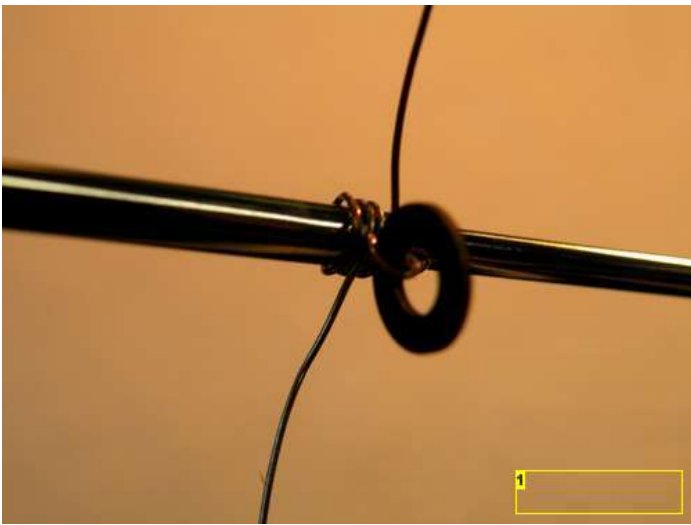


Image Notes

1. Wrap the wire around the antenna

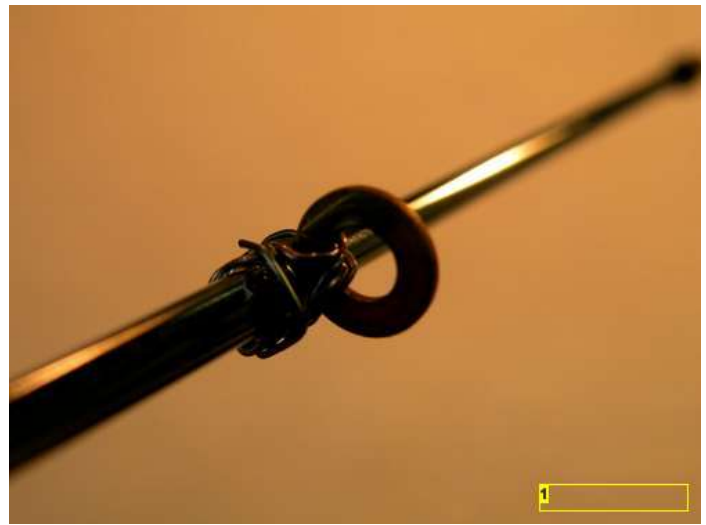


Image Notes

1. The washer is attached!

step 5: Constructing The Reel

First of all, congratulations on making it this far. If you successfully completed that last step, it is all downhill from here.

I find that for most projects, it is good and highly beneficial to start with a big picture. Otherwise, building our Pocket-sized Fishing Reel would be a bit like doing a puzzle without the picture on the box. So, I have included a picture of the finished reel on each of the next few steps, so you will know what you are working towards.

First, get the binder clip and two of the medium washers. Lay one of the washers flat on a table and position the binder clip over it so that the hole in the washer is centered in the wider top part of the binder clip. Use either super glue or hot glue to attach these two pieces together. Once the glue has dried, repeat this procedure on the opposite side of the binder clip.

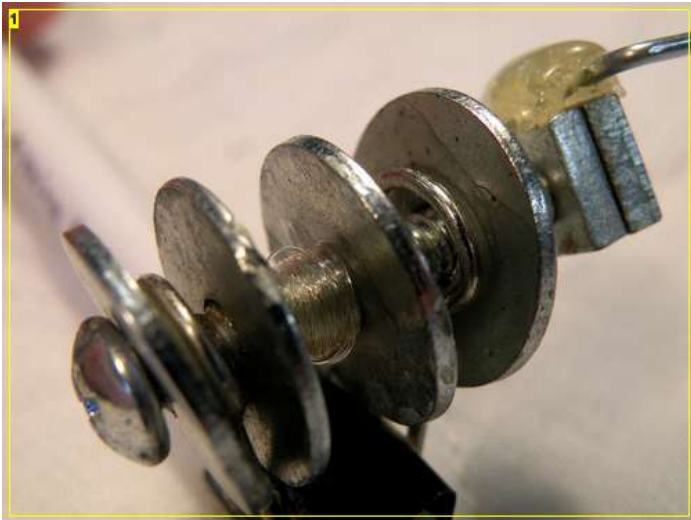


Image Notes

1. This is the finished reel. Use this picture for reference.

step 6: Construction the Reel

Now, we will put the bolt into the reel, the bolt will act as a spool for the fishing line. We will also use the remaining two medium washers to further guide the line. First, put the binder clip onto the pen body by squeezing the handles; this way, the two washers we attached in the last step are parallel. Put the bolt through the first attached washer, slide both of the unattached medium washers onto the bolt and push the bolt through the other side of the binder clip. Then, screw on one of the nuts to make sure all your hard work is not destroyed by gravity or sabotaged by fish.



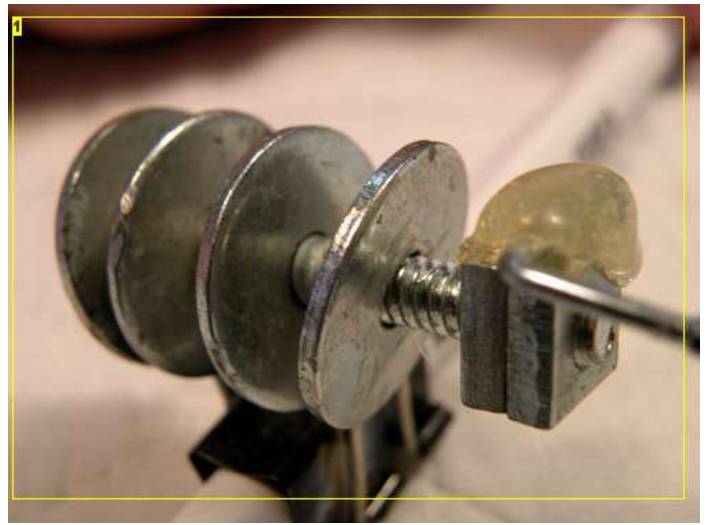


Image Notes

1. This is the finished reel. Use this picture for reference.

step 7: The Handle

This step is as easy. Bend the small nail in half. Use hot glue to attach one side to the second nut. Once the glue is dry, screw it on the bolt. That is it.



Image Notes

1. I hate these hot glue webs.

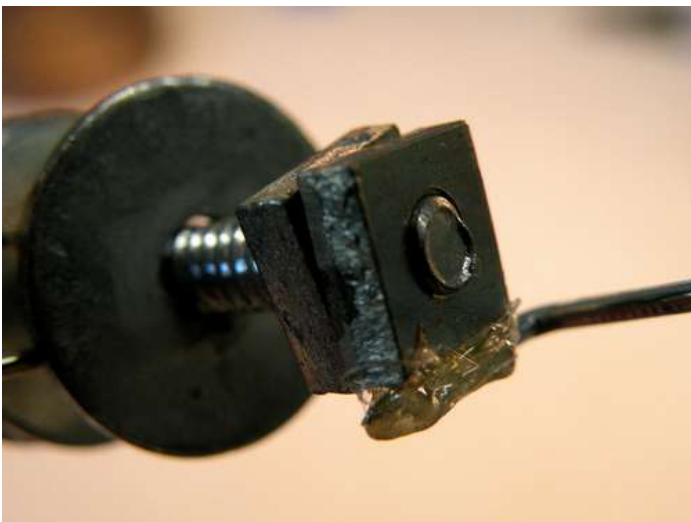


Image Notes

1. This is the finished reel. Use this picture for reference.

step 8: Gluing

In this step you will attach various pieces together with glue:

- Glue the binder clip handles to the black body of the clip so that the handles will not move. Either hot glue or super glue will work for this task.
- Glue the two loose washers to the bolt so that neither touch the binder clip handles. Do not put them too close however, because the space between them will be used to wrap the fishing line around. I suggest applying super glue to the bolt and sliding the washer onto the glue.
- Apply some extra hot glue to the bent nail. This will both reinforce this important, and heavily tested, joint and fasten the two nuts together.
- Glue the two nuts to the bolt so that they do not twist off while you are reeling in a giant fish.



Image Notes

1. This is the finished reel. Use this picture for reference.

step 9: Rigging The Pole

A fishing pole is not much good without fishing line and a hook. Take out your fishing line and tie one end around the bolt, between the inner two washers. There is no special knot for this, just tie a regular double knot. Pass the line under the bolt and out towards the pole end of the rod. Then, holding the line between your thumb and forefinger of one hand, use the other hand to spin the handle clockwise until there is a good amount of line on the reel.

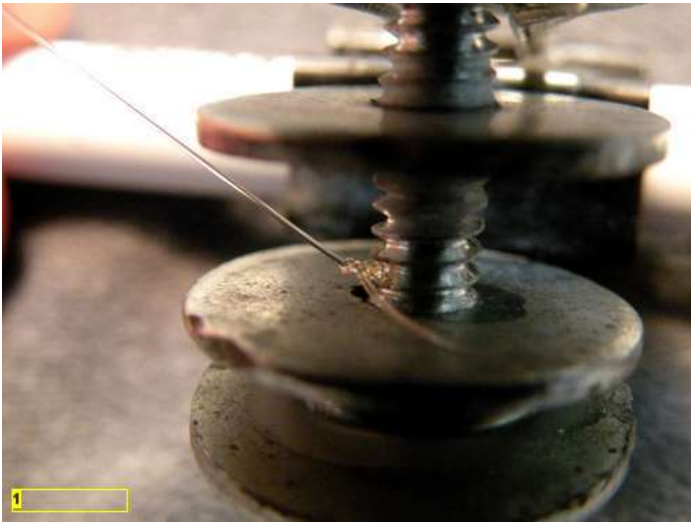


Image Notes

1. The line is tied around the knot.

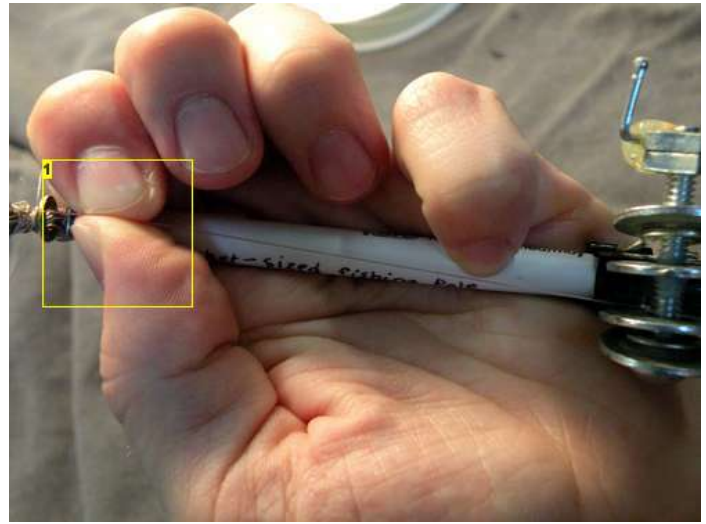


Image Notes

1. Hold the line between your fingers to keep tension.



Image Notes

1. A length of fishing line in the reel.

step 10: Rigging The Pole

Now that you have fishing line on the reel, pass the free end of the fishing line through all of the small washers and tie it to the swivel using a Palomar Knot. If you do not know how to tie a Palomar Knot, watch this video I made:

The song in the movie is *Maple Leaf Rag* by Scott Joplin.

To the swivel, you can attach pretty much anything: snelled hooks, lures, spinners or even a fern if you so desire. With luck, a fish will subsequently attach itself to one of those objects.

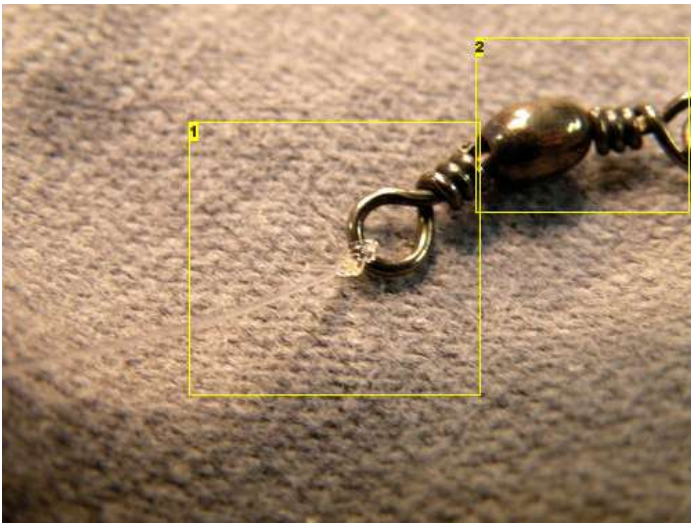


Image Notes

- 1. A Palomar Knot
- 2. A Swivel

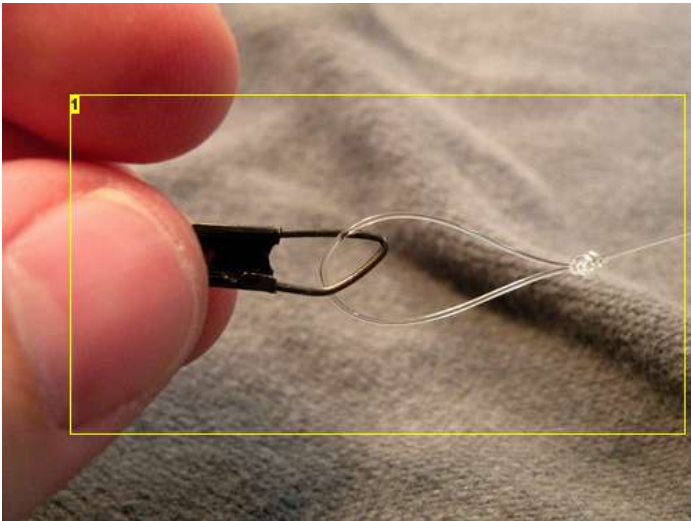


Image Notes

- 1. A snelled hook clipped to the swivel.

Image Notes

- 1. Attach the swivel here.

step 11: There, You Are Done

Congratulations on building your very own Pocket-sized Fishing Rod and Reel. Thank you for reading this Instructable. Now to fishing already!



Related Instructables



How to Catch, Clean and Cook a Fish! by lamar5292



How to fish by craigl



Pocket Sized Survival Fishing Kit by sokamiwohali



Pocket Fishing Kit by LonelyShadow



pocket sized fly holder by flyfishergrant



Puzzle box survival kit by voemaster



Sea Fishing by K-Dawg



Under the skirt of a Hula Popper. by trainer66

Comments

[36 comments](#) [Add Comment](#)



Lokisgodhi says:

Nov 18, 2009. 7:22 AM [REPLY](#)

They used to make low end fishing rods out of telescoping steel and aluminum back in the 1930-40s, so there's no problem with this concept.

I think that using actual guides and wrapping and epoxying them on the antenna would greatly improve this. Cut off the tip and replace it with an actual rod tip that fits the end's diameter. Then hot melt glue it and wrap it as well. That's what's done on real rods.

The reel needs a serious redesign .

Maybe a threaded insert in the end of the handle so you can screw in a threaded piece of steel with an L bend. Mount a spool made out of an old small diameter sewing thread thread with two body washers epoxyed on to the ends. Make sure it's in line with the guides.

www.shopchampiontrailers.com/prodinfo.asp



minhazwaris says:
how can you cast?

Nov 1, 2009. 4:19 AM [REPLY](#)



pdub420 says:

Not to be negative, but wouldn't a fish of any decent size bend the antenna?

Jul 14, 2009. 4:08 PM [REPLY](#)



mo5 says:
unless your fishing for minnos

Sep 27, 2009. 1:05 PM [REPLY](#)



browncar says:

yeah I was thinking of a design for a fishing pole myself and thought the same thing that an antenna wouldn't work too well. Maybe a dowel rod or metal rod would be better.

Jul 19, 2009. 10:45 PM [REPLY](#)



pdub420 says:

Jul 20, 2009. 1:49 PM [REPLY](#)

How about some telescoping bamboo? Not sure where to get something like that other than making it, but bamboo is strong and can be made to telescope. Obviously we've all seen bamboo poles before so this isn't new. If you can't get pieces that will telescope maybe just some pieces that will fit together and when broken down attached together with some rubber bands or a velcro cable wrap. Just one thought.



browncar says:

Jul 20, 2009. 4:15 PM [REPLY](#)

Yeah I was thinking dowel rods with metal ends that would screw together. I just haven't thought of the pieces yet entirely. But bamboo would work if you could find the pieces like your describing. It would be lightweight.



cdousley says:

Aug 22, 2009. 8:05 PM [REPLY](#)

i have been trying to solve the problem and i realized it dose not need to be a fishing ("pole") im in the early stages of an Altoids tin fishing device



pdub420 says:

Aug 23, 2009. 10:49 AM [REPLY](#)

Let me know when you post it. I'm intrigued.



cdousley says:

Jul 20, 2009. 5:20 PM [REPLY](#)

U could put that in an altoids tin



pdub420 says:

Jul 21, 2009. 10:13 AM [REPLY](#)

I wonder if Altoids market share has risen based solely on projects on Instructables and in MAKE magazine.



cdousley says:

Aug 22, 2009. 7:53 PM [REPLY](#)

i have noticed them being more popular.....



okieman says:

Sep 27, 2009. 12:42 PM [REPLY](#)

great idea, however as an avid fisherman, one major flaw exists. the telescoping antenna is mostly rigid, one good fish and it would be the end of the telescoping piece. so we should come up with something with a little more "give" and then well all be catching pocket fish. lol thanx



tomtheweirdo says:

Sep 14, 2009. 9:31 PM [REPLY](#)

How do you cast? (if possible)



bobert610 says:

Aug 12, 2009. 8:11 AM [REPLY](#)

this is a pretty good fishing rod. I tried using bigger everything, like pvc pipe and a huge antenna. plus bigger washers and nuts. Doing this makes an excellent mid sized telescoping pole. Kudos to you for the 'ible though! :D



rada194 says:

Jul 28, 2009. 6:36 PM [REPLY](#)

I made one and it sucks u can only reel in..... To cast you have to reel the opposite way and then kind of cast like a fly fishermen. but it is cool to have a fishing rod in my pocket



erickikim says:

Jul 26, 2009. 6:49 PM [REPLY](#)

wow!! this looks really cool!! although, shouldnt u use something stronger than a radio antenna? o well. i want 2 build this! how well does this work?



becauseican says:

Jul 25, 2009. 11:34 AM [REPLY](#)

i recently boughta telescoping fishing rodn\ it took the shape of a pen.



pen_bow_arrow says:

Jul 16, 2009. 5:30 PM [REPLY](#)

However, conventional fishing poles are long, fragile, and hard to carry, or otherwise transport. -My dad came up with a good way to transport conventional poles. He took an old PVC pipe and cut it so that it was about the size of half a pole, since most poles pull apart into 2 piecec. He covered one end with duct tape and stuck the 2 halves into it. (currently holds about 7 poles)



cdousley says:

Jul 20, 2009. 5:25 PM [REPLY](#)

Not as fragile as a hot glue radio antenna



canida says:
So, how big a minnow can you catch with this? ;)

Jul 14, 2009. 11:07 AM [REPLY](#)

puppylinux says:
(removed by author or community request)

Jul 16, 2009. 9:11 PM



cdousley says:
Dont be mean he caught the worlds largest jr. Miniture baby minnow i heard it was over 3 cm long

Jul 20, 2009. 5:24 PM [REPLY](#)



ilpug says:
im googling you if your a fake then i will verbally torment you =)

Jul 19, 2009. 7:06 AM [REPLY](#)



covey12 says:
really i don't believe you what is your name? and where'd you catch them

Jul 18, 2009. 6:50 PM [REPLY](#)

puppylinux says:
(removed by author or community request)

Jul 19, 2009. 12:25 AM



pdub420 says:
I suppose psychedelic could loosely be used here, but you make it sound like covey12 is akin to a Pink Floyd laser light show, or a lava lamp. :)

Jul 20, 2009. 1:56 PM [REPLY](#)



cdousley says:
Its for small fish but u need better than hot glue for the antena like 2 part epoxy

Jul 20, 2009. 5:19 PM [REPLY](#)



tombuckey says:
to make it easier for me im going to make it just as a role rig and see how it goes. i going fishing next week-end so if its made by then ill take it and report back :P

Jul 19, 2009. 12:30 PM [REPLY](#)



barry_allen7 says:
I just made this and I love it! Thanks for posting this! Have you tried fishing with it yet? I want to know how well it works. =)

Jul 19, 2009. 9:39 AM [REPLY](#)



Halotriple3 says:
This goes great with my Altoids tackle box! Awesome instructable!

Jul 19, 2009. 1:49 AM [REPLY](#)



pen_bow_arrow says:
just thought of a few things that would make this easier: 1. a sewing bobbin that fits on the bolt would make an excellent place for the line, you could wind it around before attaching it to the reel. 2. they make commercially available rod guides, with attachment similar to shrink tubing

Jul 16, 2009. 11:07 PM [REPLY](#)



altontoth says:
You know, I'm all for DIY projects and attitudes; I've even reinvented the wheel on an occasion or two. But wouldn't one of these suffice just as well? http://www.youtube.com/watch?v=6Fh_YwAnv7w I remember my dad having one when I was a kid, and I remember catching a trout or two with it off the docks while I was waiting for him to get the boat in the water.

Jul 15, 2009. 9:37 PM [REPLY](#)



Mr. Bricoleur says:
well, personally, I would rather use a bottle-reel, ghetto as it may seem :D because the amount of line retrieved with each turn of the reel of this would be not very much. however, great idea! :D might modify a few things and make one myself.

Jul 14, 2009. 9:32 PM [REPLY](#)



guy90 says:
Its a cool idea! thanks for sharing this ;)

Jul 14, 2009. 9:15 PM [REPLY](#)



wenpherd says:
is that song pineapple rage!?! i love that song!!!

Jul 14, 2009. 12:56 PM [REPLY](#)