# **Do-nothing Machine**

by perry112358 on March 4, 2009

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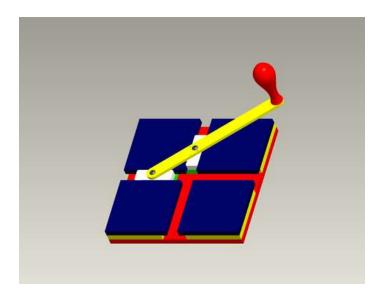
### Intro: Do-nothing Machine

Do you like to do nothing?

Introducing the Do-nothing Machine. As the name suggest it does absolutely positively nothing useful. Sure it may entertain some people for a few minutes, last about an hour on me, but it still does nothing.

This is a fairly easy machine to build. Takes a few hours to cut out the pieces and a few more to glue together and let dry. I have chosen a simple layered design so that those without a router or other means of cutting a T slot could easily complete this project.

I used Pro/Engineer 4.0, a CAD program, to draw up my design and to determine the dimensions. The drawings are provided as a .PDF at this step for download. They will also be provided as pictures in the next step.





#### File Downloads

do-nothing\_machine.zip (329 KB)

[NOTE: When saving, if you see .tmp as the file ext, rename it to 'do-nothing\_machine.zip']

### step 1: Cut Everything Out.

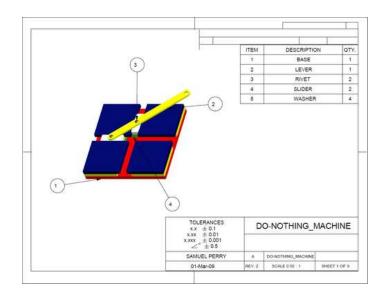
# Materials

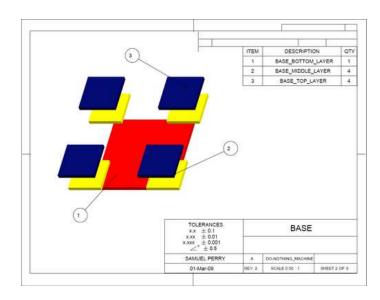
- 1/4 inch plywood. I found some cabinet grade scraps in my shop. Any type will do it just depends on how well you wish the finish to look.
- 4X 1/8 inch washers
- 2X 1/8 inch by 3/4 inch long pop rivets
- 1/2 inch by 1/8 inch steel, brass or other strong material to make a lever.

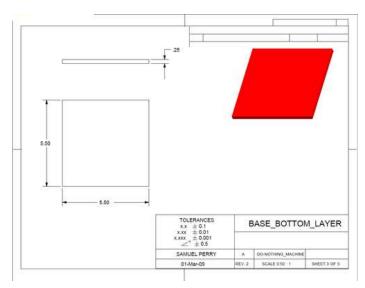
Cut out all the required pieces any way you find easy. I used a miter saw so that I could keep them a square as possible. You could use any assortment of tools such as a miter saw, table saw, jig saw, hand saw, mill (if you really like things square) and any other type of saw. How they are cut out is not as important as the parts and dimensions themselves. The important thing is that you keep as close the the dimensions as possible, especially the slider parts and lever. See step four before you cut out the slider pieces. Also refer to this step and step six before cutting the lever.

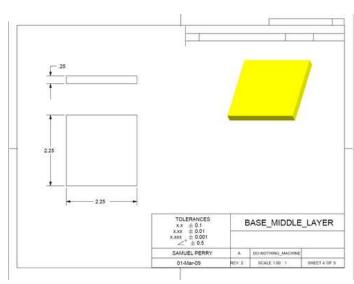
The pictures provided are exactly the same as those in the .PDF

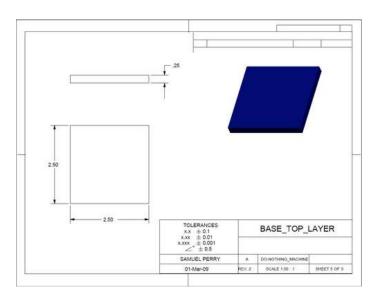
If you find any of the drawings unclear please point that out to me so that I may correct them.

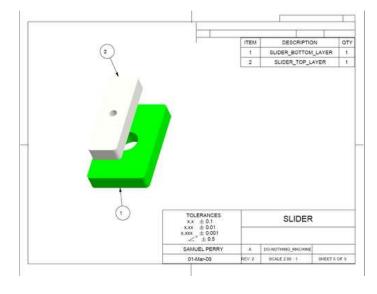


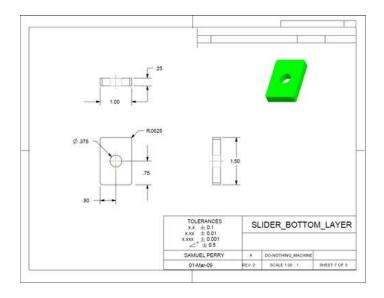


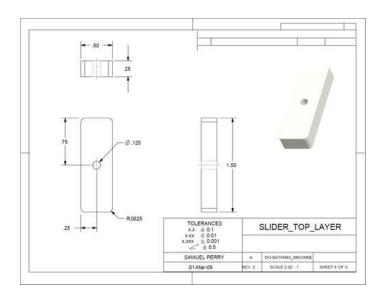


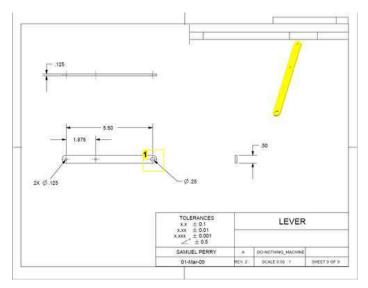














1. If you wish to only put a handle through here make this hold the size of the cabinet handle bolt. This size will allow a pencil to slip through. See videos.



# Image Notes

1. Sand all parts for a nice finish

# step 2: Gather Tools and Parts

Aside from the parts you cut out in the last step you will need the following:

- Wax Paper
- Glue
- Clamps, 4 Minimum
- Paper Towel
- Wooden Splint
- Straight Edge
- Ruler/Dial Caliper

\*Optional is a round cabinet handle.

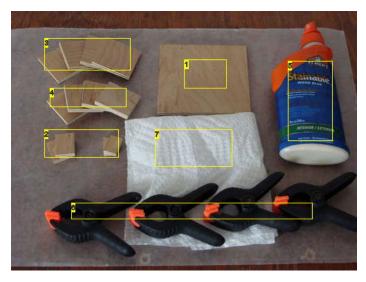
# Set up Work Space

Lay the wax paper down so you keep your base clean and also the bench free of loose wood glue.

The more clamps you can find the easier it will be to hold the layers tight so they set nice. Set these aside for a minute

Any type of wood glue is acceptable. I had this stainable stuff laying around from a previous project. Keep this close, you will be using it a lot.

A paper towel is useful if you get to much glue between the layers. You don't want glue seeping into the channel that the sliders will be riding on. A wet and dry towel would be best.



#### **Image Notes**

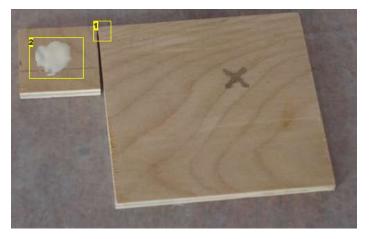
- 1. Base
- 2. Slider Layers
- 3. Top Layer
- 4. Middle Laver
- 5. Any Wood Glue Will do
- 6. 4 or More clamps. The more the better. I had 8 of these.
- 7. To wipe up glue spills

### step 3: Glue Clamp, Repeat.

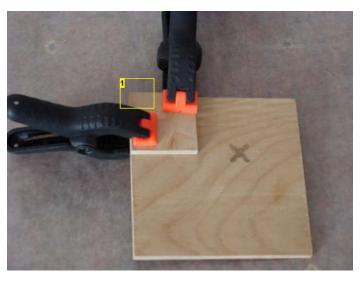
Now to begin gluing the middle layer.

Set the base out on the wax paper and gather the four middle layer squares so that they are within easy reach.

- 1) Pick the best corner of the base. Mark this corner with pencil so that you can easily find it again. Pick the best corner of the middle layer and point it towards the middle of the base. Add glue to the under side of the middle layer and align it with the corner of the base. Make sure both edges are flush as possible. Clamp the two pieces together. Two or more clamps may be needed. Check to make sure that no glue has seeped out of the crack towards the middle of the base. If so clean it up with your wet towel or wooden splint.
- 2) Now take the straight edge and align it to one of the sides of the layer you just clamped on. This will assure that the channel resulting from the layers will be aligned. Using the bottom slider layers as spacers glue and clamp the next layer. Make sure you use the 1 inch dimension of the spacer to make the channel. Again pick the cleanest and sharpest corner and place it so that it is near the center of the base. Clamp with as many as necessary. Again check for glue seeping on the base into the channel we will be making with the layers. You do not want it to dry so that the sliders are caught on them. Assure that the slider is snug between the two squares and that the squares are still aligned with the starting edge you clamped on earlier. Make sure to do this as soon as you have clamped the pieces as sometimes the clamps will twist the middle layer squares. The glue does dry quickly is some cases. Mine is suppose to be set within an hour but I have found that it holds the layers well within minutes. You will want to correct any mistakes quickly.
- 3) Using the straight edge and the sliders place the third layer similar to the second with the best corner towards the center and keeping glue out of the channel. Check alignment before and after clamping.
- 4) For the last piece you can ditch the straight edge and just use the two bottom layer sliders. Again place the best corner towards the center. Glue, clamp in place and assure that the sliders are snugly in the channel but still able to slide. Clean up any loose glue and wait for the glue to set.
- \*"You may notice that aside form the first corner you glued the rest do not align as well. Do not attempt to correct this. You want to first assure that the inner channel is the correct dimension before you worry about the outside dimension which is less important. We will clean this up later.
- \*"After the glue is set remove the clamps and check to make sure the sliders fit within the resulting channels. If the sliders are too loose or tight start over again and be careful while gluing and clamping to not hit the clamps so much that the layers are shifted. Remember you want the slider to be snug but no so that movement is inhibited."
- \*"If any glue has been missed and allowed to dry in the channel remove it with a knife or sand paper now."



- Image Notes
  1. Best corner of the base.
  2. A little glue does it.



**Image Notes** 

1. Corners are flush as possible

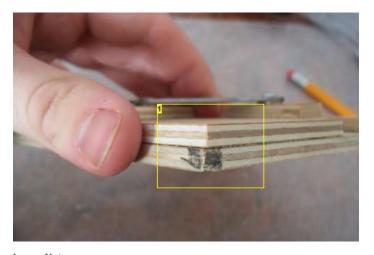
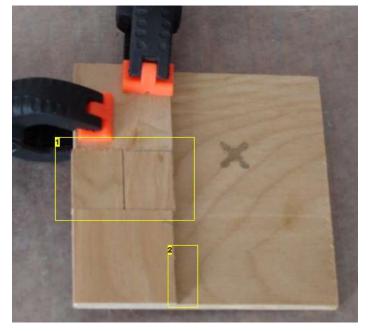


Image Notes1. Corner that was first glue has been marked for easy identification. Used again in next step.



# **Image Notes**

- 1. The bottom layers of the sliders are sued as spacers (1in x 1.5in) Make sure you are using the 1in dimension to make the channel.

  2. I am missing the straight edge here. This was a test fit and does not contain
- glue yet.

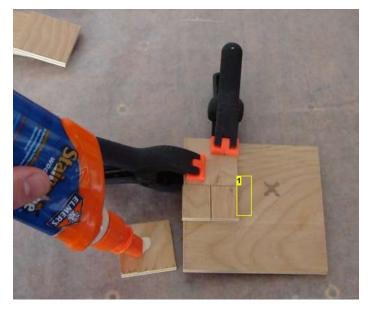
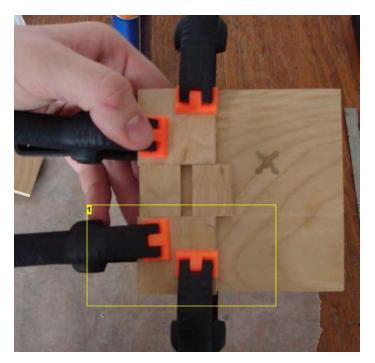


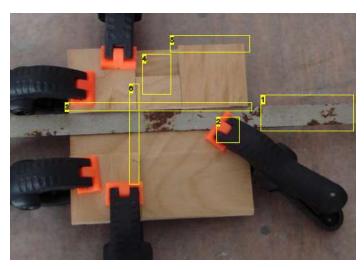
Image Notes

1. Still missing my straight edge.



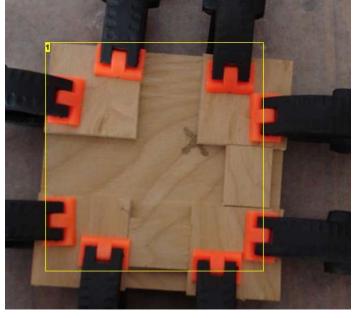
#### **Image Notes**

1. Glued, clamped and checked twice.



#### **Image Notes**

- 1. Straight edge for aligning the second and third corners. Note that the sliders are also used.
- 2. You don't need much to clamp it
- 3. These surfaces should be perfectly aligned.
- 4. Nice and snug fit.
- 5. The edges over hang. This is not critical and will be fixed. Caused by the sliders not being able to be cut perfectly to 1 inch.
- 6. These should also be perfectly aligned.



#### Image Notes

1. Waiting to set and dry. You can move on to the next step.

### step 4: Assembling The Sliders

Gather the slider layers, washers, rivets, lever and necessary tools.

The sliders are assembled as such.

- 1) Measure the position of the top layer on the bottom. The edge of the top should be 1/4 in from the edge of the bottom. I used a dial caliper but a steel ruler is acceptable. The way we glue the top layer together will offset any discrepancy in this measurement. Glue the two slider layers together and clamp. I have found that if you make one large slider, about 4 inches, and then cut to length it is easier. Also drilling the holes after they have been glued together helps to keep the holes well aligned. Allow glue to dry. Round the corners as shown in the drawings.
- 2) The sliders are assembled as follows: The lever is on top with a washer underneath so as to clear the top layer. After that comes the slider with the top layer (narrowest) closest to the lever. Inside the counter boar underneath the slider is another washer so that the rivet does not pull thought the wood. Using a 1/8 inch rivet, steel or aluminum is fine, attach the sliders to the lever.
- 3) Because I could not find a long enough rivet I had to used one that was over sized. This caused the rivet to stick past the bottom and this interferes with the base as

the slider lies in the channel. There are a few ways to fix this:

A. Cut the rivet.

B. Bend the rivet

It may be easier to punch the remaining "stem" out of the rivet. This is the ball end of the steel rod that breaks off and is used to flair the rivet. Using a small punch or the steel rod that broke out tap this out of the flared end. I found bending the rivet easiest. Use a pair of pliers and crush the diameter of the rivet to make it flat. Then bend the material so it goes well below the counter boar.

- 4) Mark the sliders and have an arrow point to one of the sides. Do the same in each channel so that the sliders can easily be placed in the proper channels in the correct position. Use pencil so that they may be removed after the gluing is done. In the next step the sliders may fall out of the channel during gluing and you want to be able to place them back in correctly.
- 5) Lay the slider assembly within the channels of the base and begin to prepare to glue the top layer.

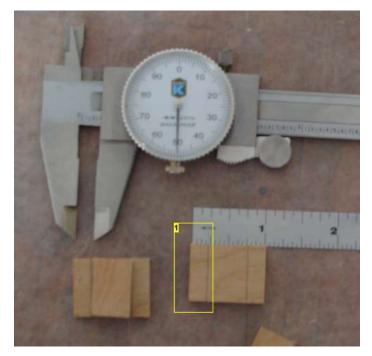


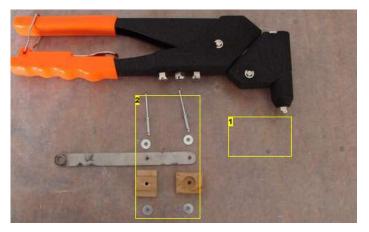
Image Notes
1. Little bit of glue

#### **Image Notes**

1. 1/4 inch from edge. Try to glue this as one large piece and then cut to length.



Image Notes1. Everything waiting to dry.



#### **Image Notes**

- 1. every thing needed for slider assembly
- 2. general assembly of layers

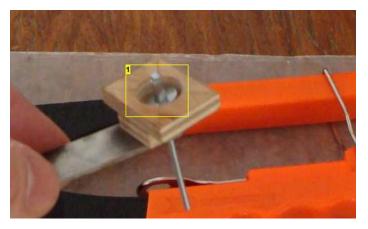


Image Notes
1. Rivet is too long. Will correct this later.

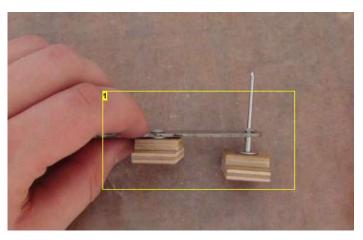


Image Notes
1. use the 1/8 inch holes. Inner Slider assembled, outer one ready to be riveted.

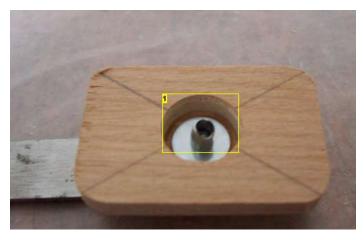


Image Notes
1. Need to push/cut this down

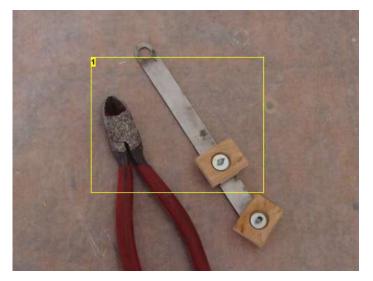


Image Notes
1. Cutting the rivet



Image Notes
1. Bending rivet over.

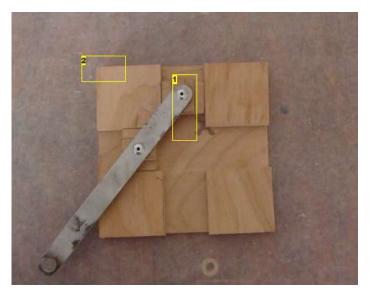


Image Notes
1. All assembled and ready.



**Image Notes** 

1. Marked. The numbers align with the arrows pointing the same direction.



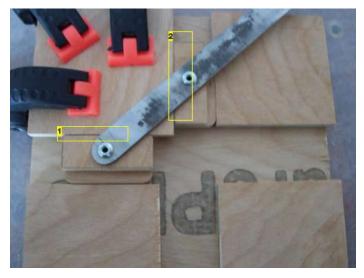
#### **Image Notes**

- 1. Place in the channel to await the next step
- 2. Corner we marked previously

# step 5: Glue Top Layer

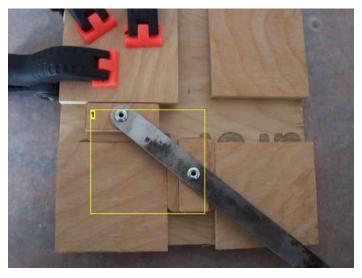
Gather the four top layer squares.

- 1) Find the corner on the base that we marked in step three. Again place the best corner towards the center of the base and glue and clamp into place. By placing the slider assembly correctly you will be able to use those as spacers to position this layer correctly. Make sure the sliders and corner have a close fit. Clamp in place. Check the make sure no glue seeps into the channel. Don't let any dry. You will have a difficult time removing it.
- 2) Now turn the lever so that the sliders move to align the next layer. Glue clamp and wipe extra glue again. Repeat this for all the corners rotating the lever every time. You may have to remove some clamps to spin the lever into the correct place. I waited for the first two corners to dry before moving on.
- 3) Let everything dry for the recommended about of time, about 24 hours. You do not want to put strain on the joints while they are still drying.
- 4) Now that everything is dry try to twist the lever, It should move in an elliptical path. There will be resistance but with use this will be reduced. Mine will only spin clockwise as there is some hang up due to the lever bending when I drilled the holes. Try both ways before determining that you need to start over.



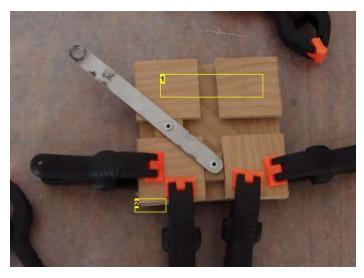
#### **Image Notes**

- 1. Keep joints tight
- 2. Use both sides to align



#### **Image Notes**

1. I had to wait after gluing this corner to be able to do the last two sides. I could not turn the handle without it hitting the clamps.



#### **Image Notes**

- 1. Waited for these to dry before doing the next two.
- 2. You can see the layers not lined up. Will address this in next step

# step 6: Finishing Up

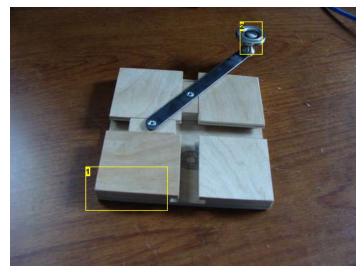
1) Now look at the ends. You will see that they are not very well aligned. Some of the layers stick out from the base and others are too short. Finding that corner we marked again you should see that this is the best of all the sides with the layers line up fairly well. Using this side against the fence cut the other sides with a miter or table saw. You will want to cut every side and use each previously cut side against the fence. You may also want to measure so that it remains square. This is not important and is merely aesthetic.

2) Go to a sanding table and round the corners if you like.

3) Now you can either attach the cabinet handle to the lever or make an ellipse. Yes that is right I have found a use for this machine. See the video below. It's fun for about 2 minutes then I went and put the handle on. With a washer the handle fits over the 1/4 inch hole. I would advise against drilling the 1/4 inch hole and just go for the handle, making ellipses is not that fun.

You now posses the Do-nothing Machine. Enabling you to do nothing anytime you wish. This is great to show to family and friends and then explain how much time you spent building it and how it does nothing. Of course you could always show how it makes ellipses but that would be ruining the fun...

Listen to it hum as it does nothing...





- Image Notes
  1. Edges trimmed and waiting for corners to be rounded.
  2. Tired quickly of making ellipses.

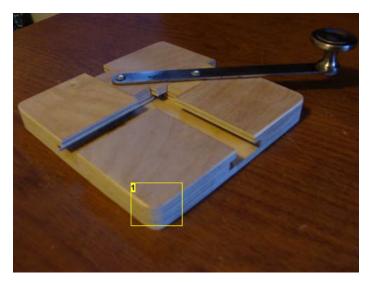


Image Notes
1. All done!

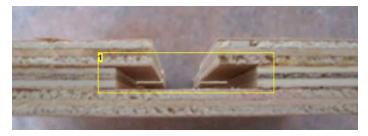
#### step 7: Last Thoughts

There are a few things I learned while making this that I feel are important to pass along.

- 1) Do not attempt to align all the corners. This will make all the sides line up nicely and while in theory this should produce the same results as the method describe it does not work in the real world. A table or miter saw is very inaccurate. Don't make the same mistake as I did. (See Pic) Your channel dimensions will be inaccurate and have a taper. Sliders do not fit well then.
- 2) It is possible to scale this to any dimension. The ones given are just suggestions. But there is one thing that should remain constant. The slider should always be long enough so that when it passes from one end to another it can span the gap. As the slider goes from right to left it must pass into the center opening of the channel and it is here that the slider may become misaligned. In order to prevent this the slider must remain in the channel it is leaving as it enters the other side. Other wise it will continue to make an arc. (See Pics for better explanation) I learned this the hard way after making and photographing my first full machine. That is why you may notice that the machine looks different from picture to picture. Aside from the change in slider the rest was still valid and I found it hard to abandon my pictures.

I hope you enjoy making this.

If you find any of my steps hard to follow, mistakes in my drawings or spelling errors (not much good at engrish) please do speak up. Now go do nothing and have fun!



#### **Image Notes**

1. Dimensions are way of from end to end. First attempt.

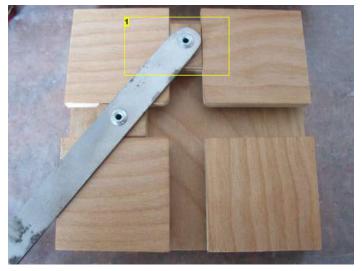
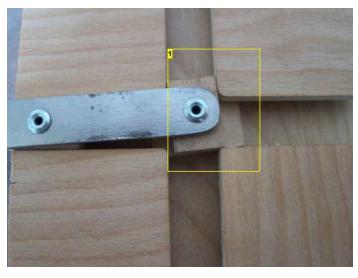
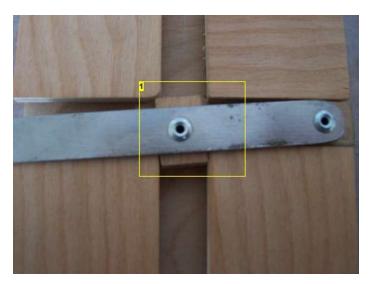


Image Notes
1. Slides nice until...



#### **Image Notes**

1. ...it twists in the middle. The slider wants to complete the arc.



#### Image Notes

1. Failure on either slider. Elongating this stopped this "arc"

# Related Instructables



**Fixed Disc** Sander from **Angle Grinder** by divxnz



kne'x grinder by zypher3.14



sticks at home by pearsonry



Make pepperoni How to build a wood fired hot tub by veloboy



and Quadcycle **Hub Flanges** Without a Lathe by KoolKat



killer apple grinder by kcmcf



**Gas Bottle** Wood Burner by btop



Macchiato by iMac

# Comments

50 comments

**Add Comment** 

view all 99 comments



Aliasmk says:

Lego made a set similar to this I think.

Aug 28, 2009. 1:09 PM REPLY



see-saw says:

Aug 16, 2009. 3:41 PM REPLY

One of my customers had one of these and showed it to me asking if I could if I could figure out what it was for. After playing with it for a few minutes he showed me the label on the bottom - it said "Bullshit Grinder"



wolf555hound says:

I rememer making on of these machines out of Lego's form this one little book. It really is entertaining!

Mar 7, 2009. 9:51 PM REPLY

ookid says:

Same here I believe it had 4 pieces that moved instead of the 2 here.

Mar 8, 2009. 12:20 PM REPLY



Dev5994 says:

yeah i remember that lego book

Mar 8, 2009. 7:05 PM REPLY



musicninja17 says:

It was the Klutz book of lego... i loved that book.....

Mar 9, 2009. 6:10 PM REPLY



Dutch433 says:

i have that book

Mar 10, 2009, 1:27 PM REPLY



wolf555hound says:

Did it have like a lego candy machine? Thats one of the book's projects.

Mar 10, 2009, 8:23 PM REPLY



142400 says:

i see a fellow gimper:)

May 12, 2009. 5:41 PM REPLY

wolf555hound says:

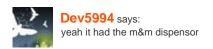
What, you mean my avatar? I made in Photoshop =]

May 12, 2009. 8:22 PM REPLY

142400 says:

oh lol im to broke to use photoshop

May 13, 2009. 5:56 PM REPLY





dodo91 says:

Mar 14, 2009. 5:58 PM REPLY

how did ALL of you have that. me myself LOVE to build with legos. i invented a lego gun. what year did the lego book you guys are talking about come out?



wolf555hound says:

I got mine at a target, like 2 years ago.

Mar 14, 2009. 7:00 PM REPLY



kurtcobain132 says:

that is seriously coooooooooooool.......

May 12, 2009. 6:27 AM REPLY



**Oblivitus** says:

I have one of these, they are an antique toy.

Apr 25, 2009, 5:37 AM REPLY



jomaro says:

Apr 23, 2009. 3:56 PM REPLY

Absolutely marvelous machine! I have to make one for myself and know already that I will spent countless time playing with it. I googled for do-nothing-machine and found this link on wikipedia.

I just love the name "bullshit grinder"....

Thanks for posting!



jomaro says:

Apr 23, 2009. 4:14 PM REPLY

Only after I posted the above I looked at the statistics of my google search. It found an amazing 23,900,000 links for the search words "do nothing machine". Man if definitively an passionate for anything that "works", even if it does nothing (that is not true for this one).



twocvbloke says:

If you went fast enough with it, you could use it to light fires... :P

Apr 16, 2009. 7:59 AM REPLY



bounty1012 says:

perhaps if the sides were of flint and the middle pieces were metal...

Apr 17, 2009. 4:04 PM REPLY



twocvbloke says:

Apr 17, 2009. 9:16 PM REPLY

Not if you base it on the "Rubbing 2 sticks together" principle, friction generates heat, heat creates hot embers, hot embers on tinder become fire...:)



bounty1012 says:

But then the thing would light on fire in your hand XD

Apr 18, 2009. 7:02 AM **REPLY** 



twocvbloke says:

That was the joke... :P

Apr 18, 2009. 11:17 AM REPLY



bounty1012 says:

lolz I get it now.

Apr 18, 2009. 11:43 AM REPLY



I\_am\_Canadian says:

Tis called a Kentucky do-nothing if I am correct. Very cool, anyway.

Mar 7, 2009. 9:43 AM **REPLY** 



Tuqit says:

Apr 18, 2009. 10:03 AM REPLY

The colloquial name across the country is "Bullsh\*t Grinder". When someone was telling a tall-tale you'd get it out and start turning it until they asked what you were doing. "I'm running that story of yours through my bullsh\*t grinder!" They've been around for centuries (both, grinder and bullsh\*t stories, well mated, the internet could use a massive digital one). And as others have discovered, the motion is eloquently elliptical. A friend built one out of aluminum stock on his Unimat decades ago using dovetail slots and sliders, putting in arm-length adjusters for the length of the axes so he can cut bevelled oval-mats for artwork in any dimensions and eccentricity desired. Quite the handy device for being just an old-timer's "Bullsh\*t Grinder". :)



dscrive says:

Apr 10, 2009. 10:19 PM REPLY

I'm pretty sure it depends on the region you are in, the first time i read about one of these is wast just called an elliptical machine, or something like that.

-	-
10	
	_

cyrozap says:

You-am-Canadian. Wait... what?!?!

Mar 7, 2009. 11:26 AM REPLY



\_**am\_Canadian** says:

Mar 7, 2009. 11:34 AM REPLY



cyrozap says:

<( '<( '<( '.' )>' )> - Kirby Mafia. LOL.

Mar 7, 2009. 11:40 AM REPLY



imshanedulong says:

!!OH CANADA!! Canada rules! I'm a PROUD Canadian!

Mar 8, 2009. 1:13 PM REPLY



cyrozap says:

You guys are just keeping Ameirca SMRAT.

Mar 8, 2009. 1:55 PM REPLY



imshanedulong says:

......Do you realize you just insulted yourself?

Mar 12, 2009. 12:56 PM REPLY



cyrozap says:

Saw it on Failblog. It's a joke.

Mar 12, 2009. 7:33 PM REPLY



imshanedulong says:

I know so was that!

Mar 22, 2009. 1:47 PM REPLY



Iridium7 says:

nice, saw that one too.

Mar 15, 2009. 2:23 PM REPLY



fozzy13 says:

this would be pretty sweet if it were modded to be an engine, kinda like a radial engine...

Apr 18, 2009. 8:00 AM REPLY



darnold100 says:

Apr 11, 2009. 8:32 AM REPLY

Nice design but it is more than a do nothing machine. With modifications it can be an oval making jig. I have been looking at purchasing one in woodworking magazine and ran across this. Thank you



clark says:

this is probably the coolest thing i've seen on instructables yet! great job!

Apr 1, 2009. 1:48 PM REPLY



The Jamalam says:

LOL! This gave me epic lols when I saw what you did with it XD well done!

faved, fived, s'scribed!

Apr 1, 2009. 1:11 PM REPLY



crazycommanche=US= says:

you had to use cad for this ohh lul...

Mar 16, 2009. 12:49 PM REPLY



as a junkie	What does it do?		
1	dodo91 says: nothing.	Mar 14, 2009. 5:53 PM <b>RE</b>	PLY
	Flumpkins says: Nothing	Mar 12, 2009. 7:01 PM <b>RE</b>	PLY
Pi	ReCreate says: awesome	Mar 13, 2009. 12:50 PM RE	PLY
	Flumpkins says: I know, right?	Mar 13, 2009. 12:56 PM <b>RE</b>	PLY
	ReCreate says: yah	Mar 13, 2009. 1:06 PM <b>RE</b>	PLY
ant.	<b>blugyblug</b> says: This thing is Epic.	Mar 11, 2009. 1:18 AM <b>RE</b>	PLY
Hero	<b>DJ Radio</b> says: Awesome, 5* and faved!	Mar 9, 2009. 8:15 PM <b>RE</b>	PLY
S.	perry112358 says: Thanks! +awesomeness	Mar 10, 2009. 5:38 AM RE	PLY

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