DOOR TRACK HARDWARE

HOW TO

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DIY DOOR HARDWARE

Design The Life You Want To Live by Lynne Knowlton

The content of this book is here to help you create the most beautiful door track hardware evvaaaaaah. The tutorial is based on a boat load of trial & error **and** the creation of several styles of gorgy gorgeous door hardware.

We have a couple styles of track hardware listed in this book. Some have been left as raw steel and others have been spray painted white (my latest FAVE.)

The door track hangers also have two options : straight and with a bend (photos throughout)

The wooden wheels are created near our home in Ontario, Canada by the local Amish.

Here's a review from a person who bought our wheels via Amazon:

These wheels are absolutely amazing! Lynne's website has fantastic pictures of some example projects as well as a handy guide on creating your own rail system. We saved HUNDREDS doing this project ourselves and could not be happier.

The wheels are absolutely gorgeous and you can tell the bearings are high-quality. The roll freely and easily and make absolutely ZERO noise.

This project was WAY easier than we thought and are THRILLED with the results so far.

If you're looking to convert your swinging doors to sliding doors and don't want to spend hundreds if not THOUSANDS PER DOOR, do the project yourself, starting with these wheels.

They're beautiful, they're sturdy, and they work wonderfully.

Let's get this door track hardware partaaaaayyyy started :) ...

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TOOLS & SUPPLIES

TOOLS:

Electric or cordless drill, 1/4” socket & driver
Adjustable wrench
Level, Tape measure, Pipe Cutter
Center punch
Drill bits for drilling metal

SUPPLIES & INSTALL

SECTION 3 : DOOR

SECTION 4: FLAT IRON TRACK

SECTION 5: FLAT IRON BAR HANGERS

SECTION 6: WOOD OR METAL DOOR STOPS

SECTION 7: WOODEN WHEELS

SECTION 8: NUTS AND BOLTS

SECTION 9: LAG BOLTS

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SECTION 15: PREP DOOR TRACK SPACERS

SECTION 16: INSTALL THE DOOR TRACK

SECTION 17: ATTACHING THE WHEELS

SECTION 18: ATTACH FLAT BAR HANGERS

SECTION 19: INSTALL THE DOOR STOPPERS

SECTION 20: ADMIRE YOUR WORK

LET'S GET SOCIAL

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DOOR

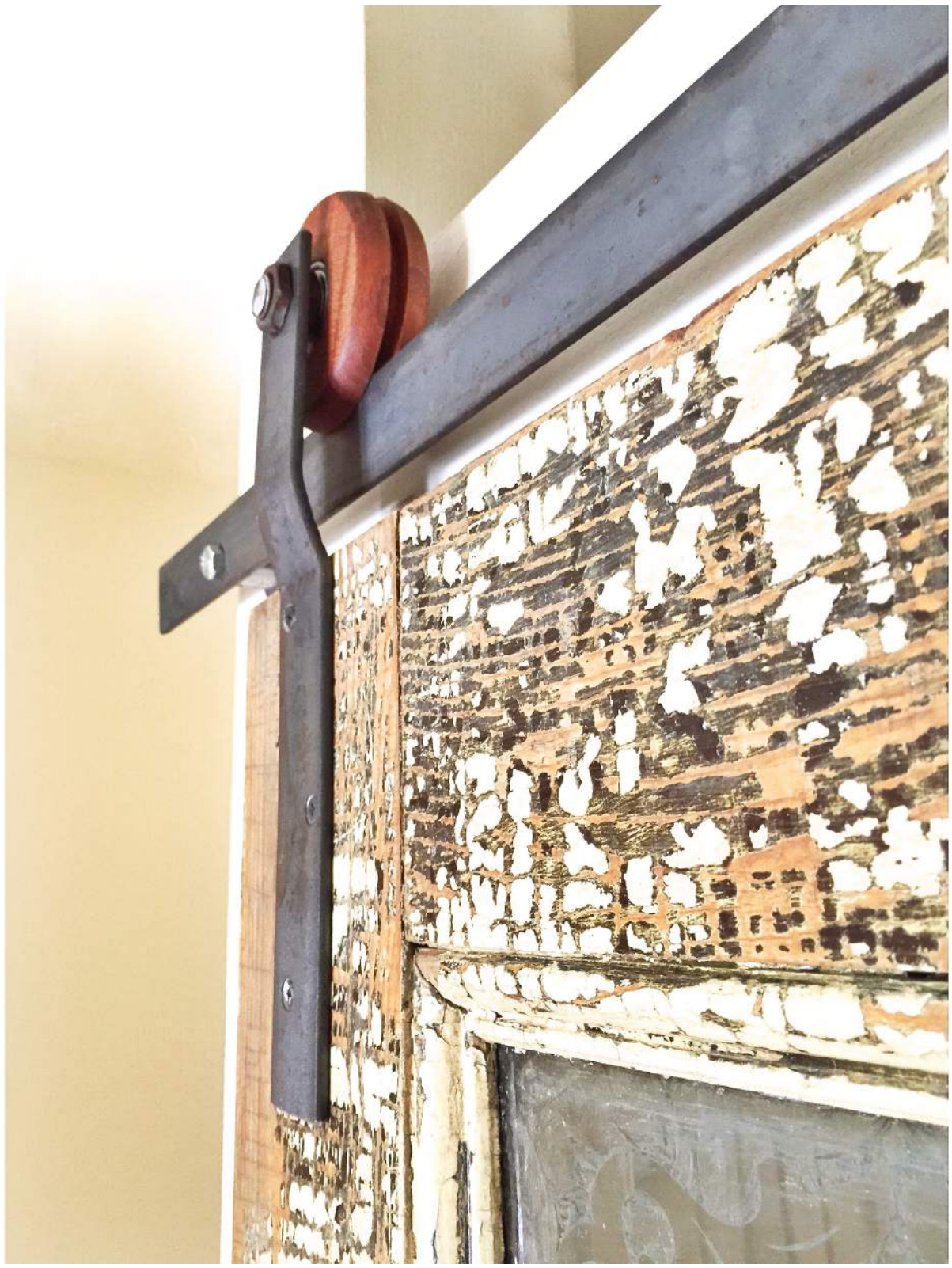
The door can be big or small and we tend to use old solid wood doors for their epic character. They can also be surprisingly affordable.

Your installation should accommodate the door sliding fully open.

The door should be slightly taller than the opening although it can extend above the opening (providing there is room above for the track and the wheels.)

The weight of the door should not be an issue unless your track is poorly secured.

We have installed 1 ” - 1 ¾” thick solid heavy wood doors and the track holds them beautifully…



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FLAT IRON TRACK

Door track flat iron bar:

Use 3/16” x 2” **or** 3/16” x 1 ¾” - readily available at a metal fabrication shop.

The length of the flat bar you need is twice the width of the door plus approx 6 inches.

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FLAT IRON BAR HANGERS

2 flat iron bar hangers:

Use the same 3/16” flat iron bar for your hangers that you used on your flat bar track.

The length we tend to use is 12”. Lengths can vary depending on your door style or your preference.

Hangers are bent in two spots to accommodate the offset needed for the wheels (see detailed diagram below showing bend).

For some installations, you can use flat hangers without a bend. A straight flat bar hanger looks equally beautiful.

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DOOR STOPS

2 Door stops and one door guide :

Wood or Metal?
Purely a beautifully creative choice.

Option 1: You can use the same 3/16” flat iron bar and make the door stops and door guides into Z brackets.

Option 2: Install a nut and bolt into the track which will prevent the door from opening (or closing) at your stop points.

Option 3: Build your own unique wooden door stoppers to attach to the wall …

2 Wooden Door stoppers installed (and painted white)

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WOODEN WHEELS

2 Wooden wheels with bearings for rolling the door on the track (available here on the website).

Our wheels are 3.5 inches in diameter and 11 inches in circumference. Each are custom fitted with high quality, strong bearings.

The inside diameter of the bearing is 5/8” to be fitted with a 5/8 inch bolt that is 2 1/2 inches long.

Each wheel is handcrafted by the local Amish. We are 2 hours NW of Toronto, Ontario Canada. We take great care in the look and feel of the wheels. They are a work of art, packaged beautifully and built to last for many years. We stand behind the quality of our work and guarantee 100% customer satisfaction.

The wheels are for sale on my blog here.

You may reach me by email here. Ask me anything. I’m a blogger and therefore *an open book*. LOL.

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NUTS & BOLTS

2 Bolts and 4 Nuts:

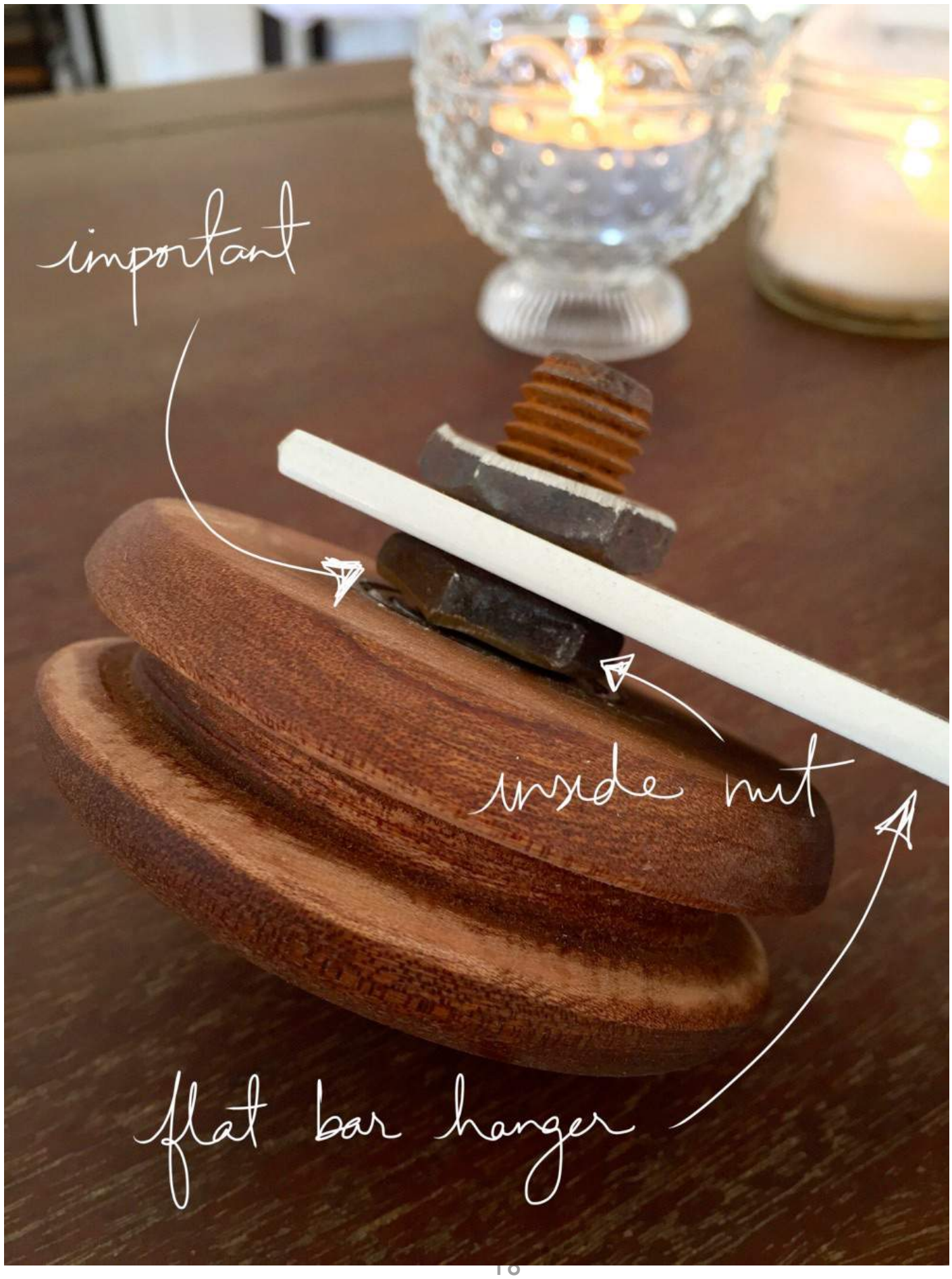
The nuts and bolts are used to secure the wooden wheels to the flat iron bar hangers.

Bolts should be 5/8” x 2 ½” long and the extra length can be cut or ground after installation (we do that purely for looks)

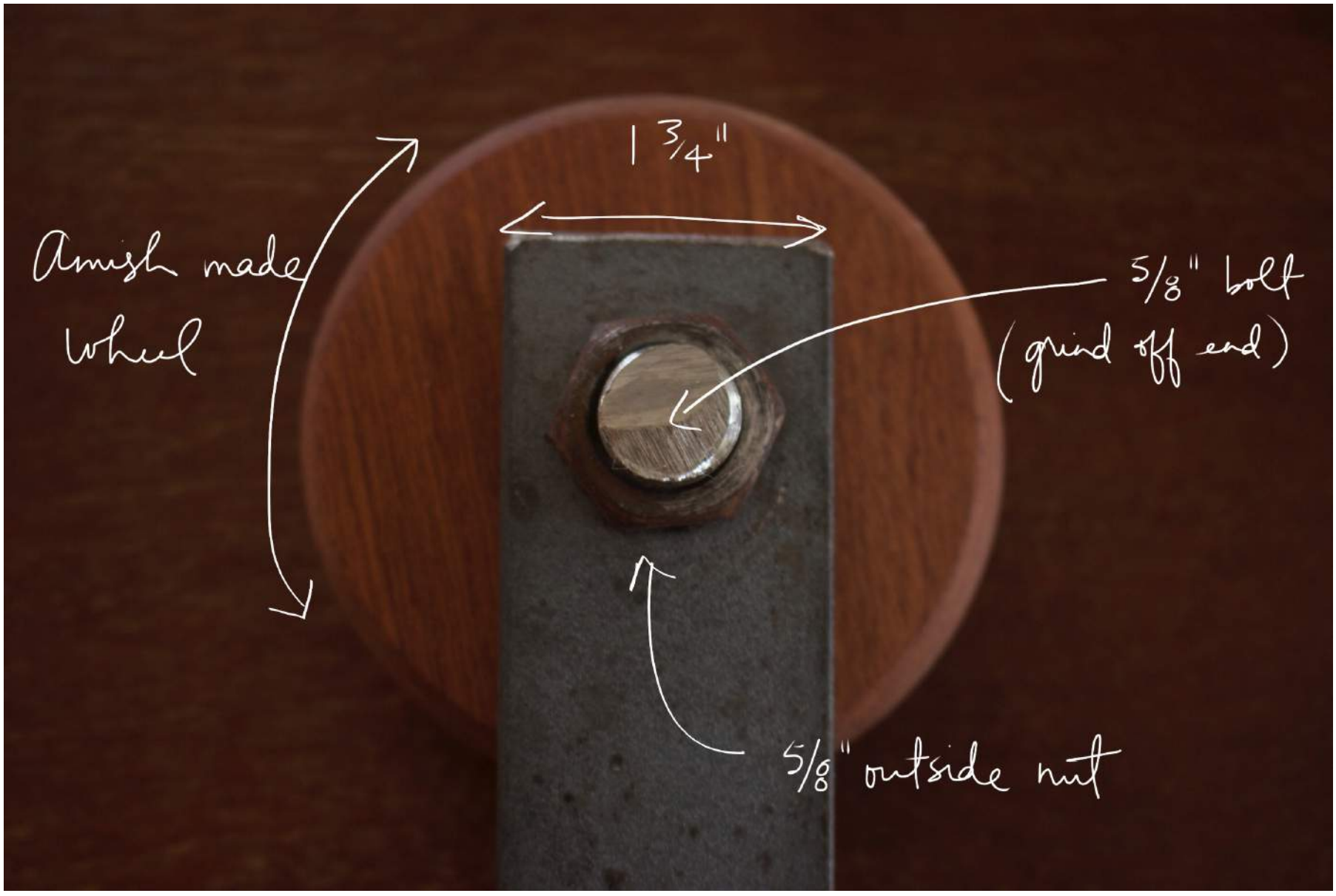
We tend not to use washers and allow the first nut to touch directly to the wheel bearing.

It's ideal to use a hex nut and even better to use a jam hex nut for the first nut adjacent to the bearing.

Note: A jam hex nut is thinner than a standard hex nut.



Here’s an example of when we did grind the end of the bolt off (shown below)…



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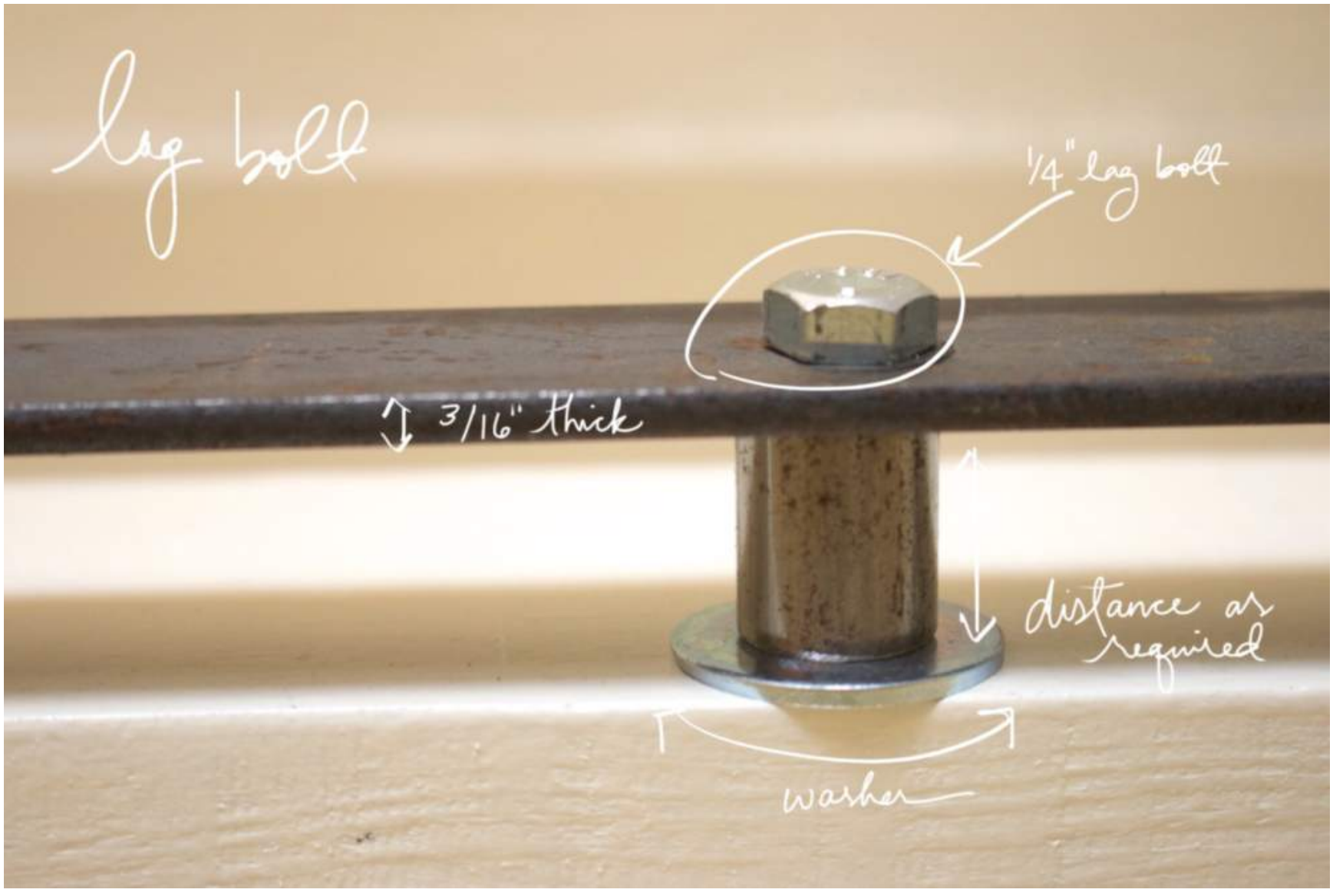
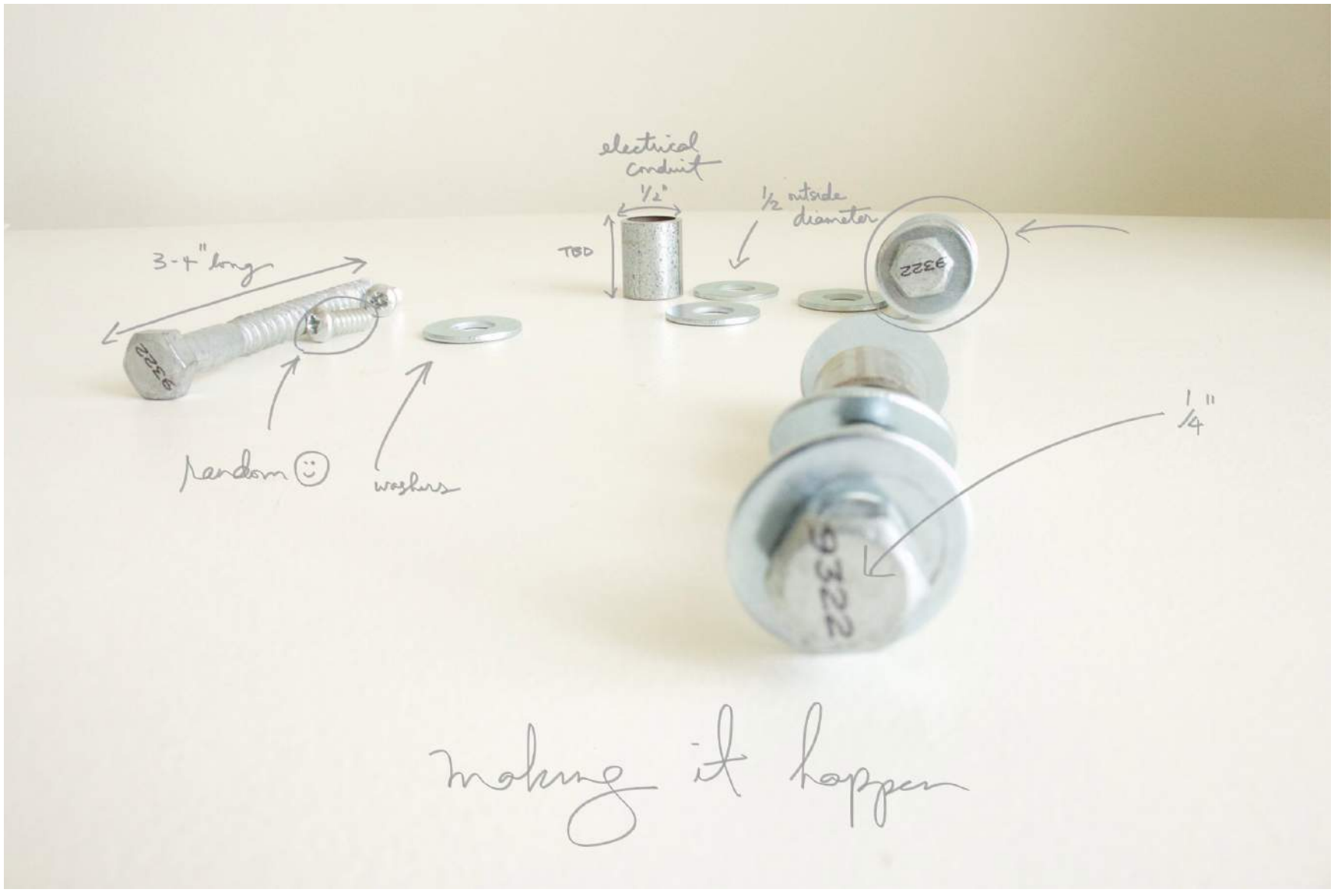
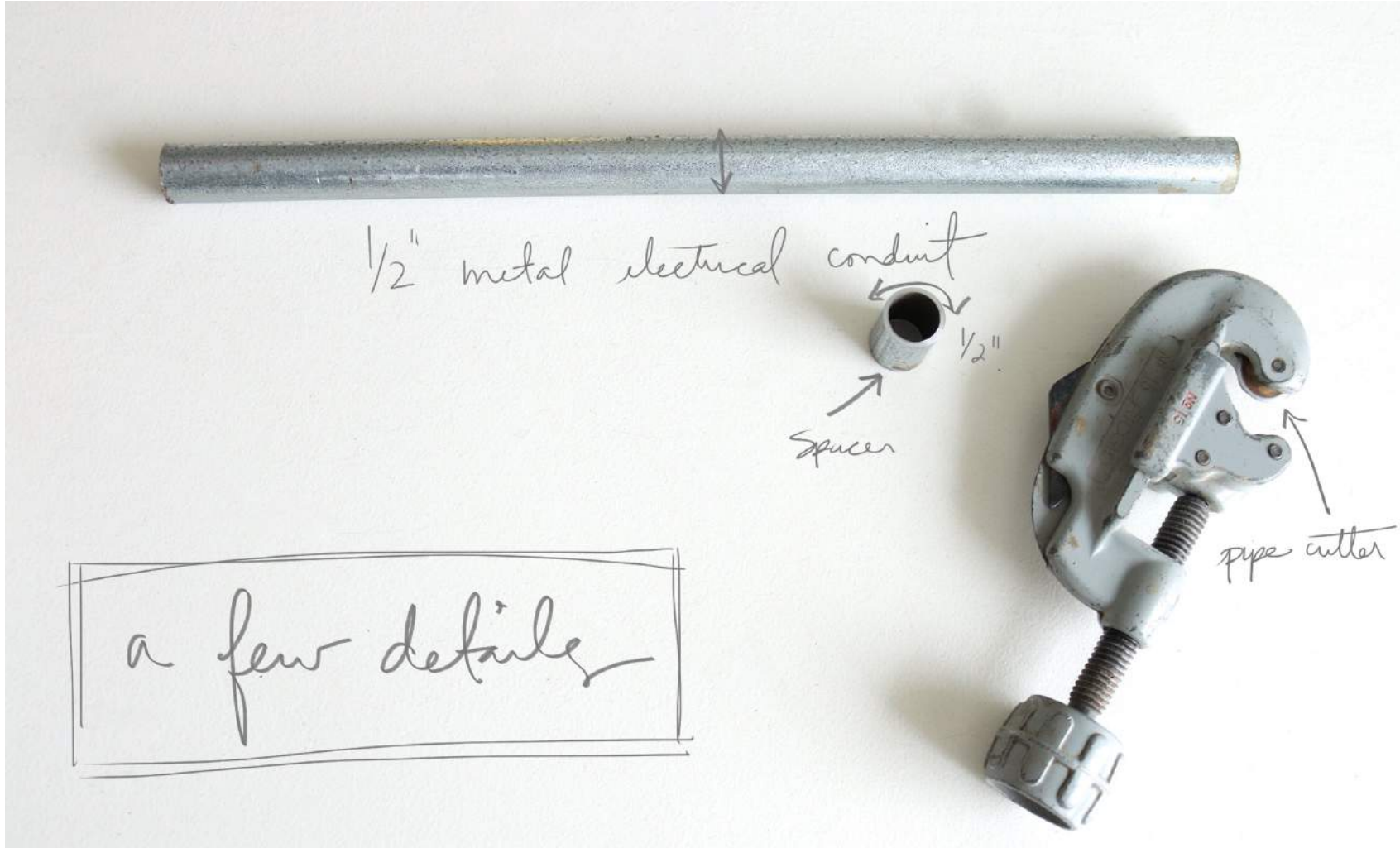
LAG BOLTS

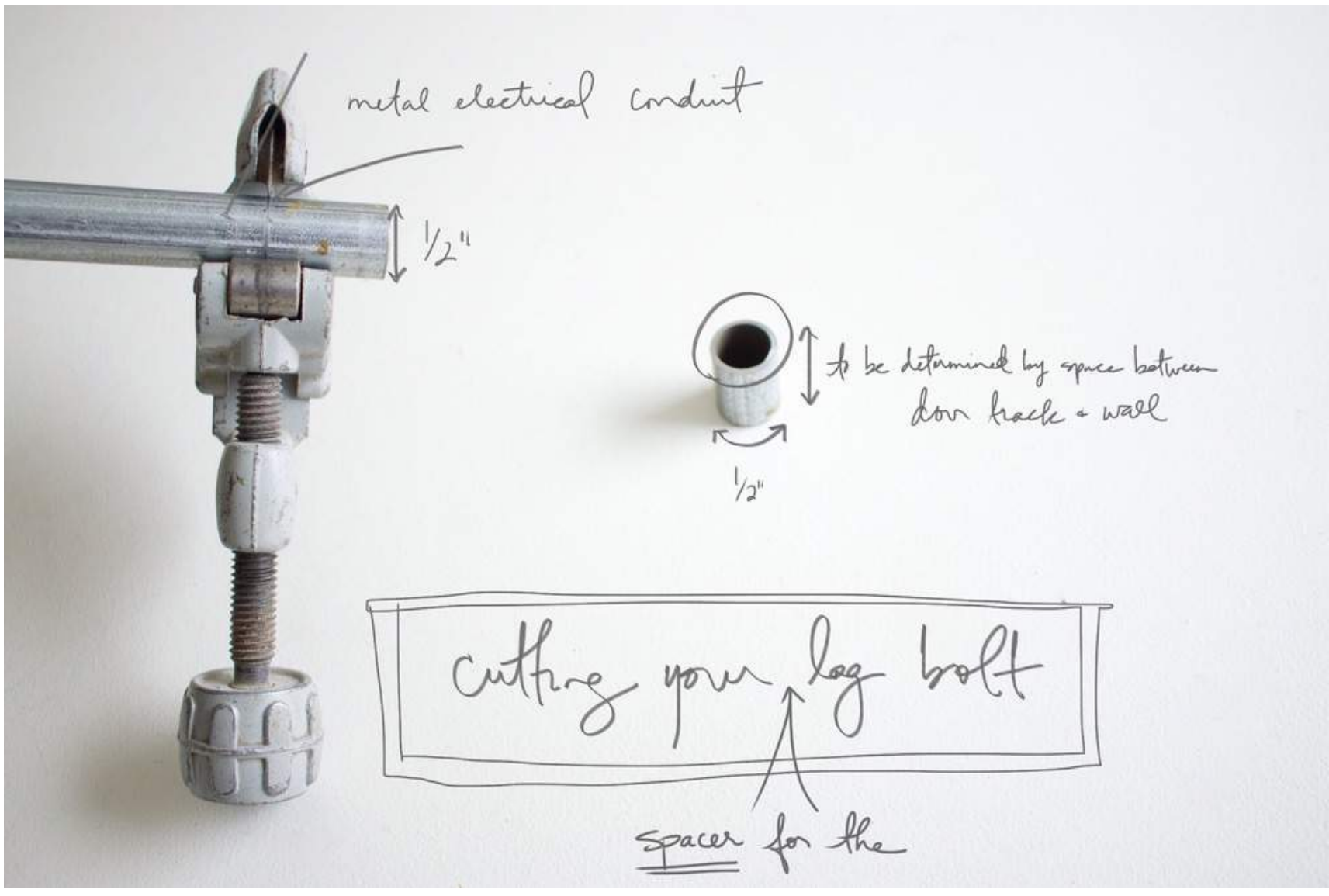
A quantity of 5 lag bolts that are ¼” x 3” or 4” long are needed to secure the door track to the wall.

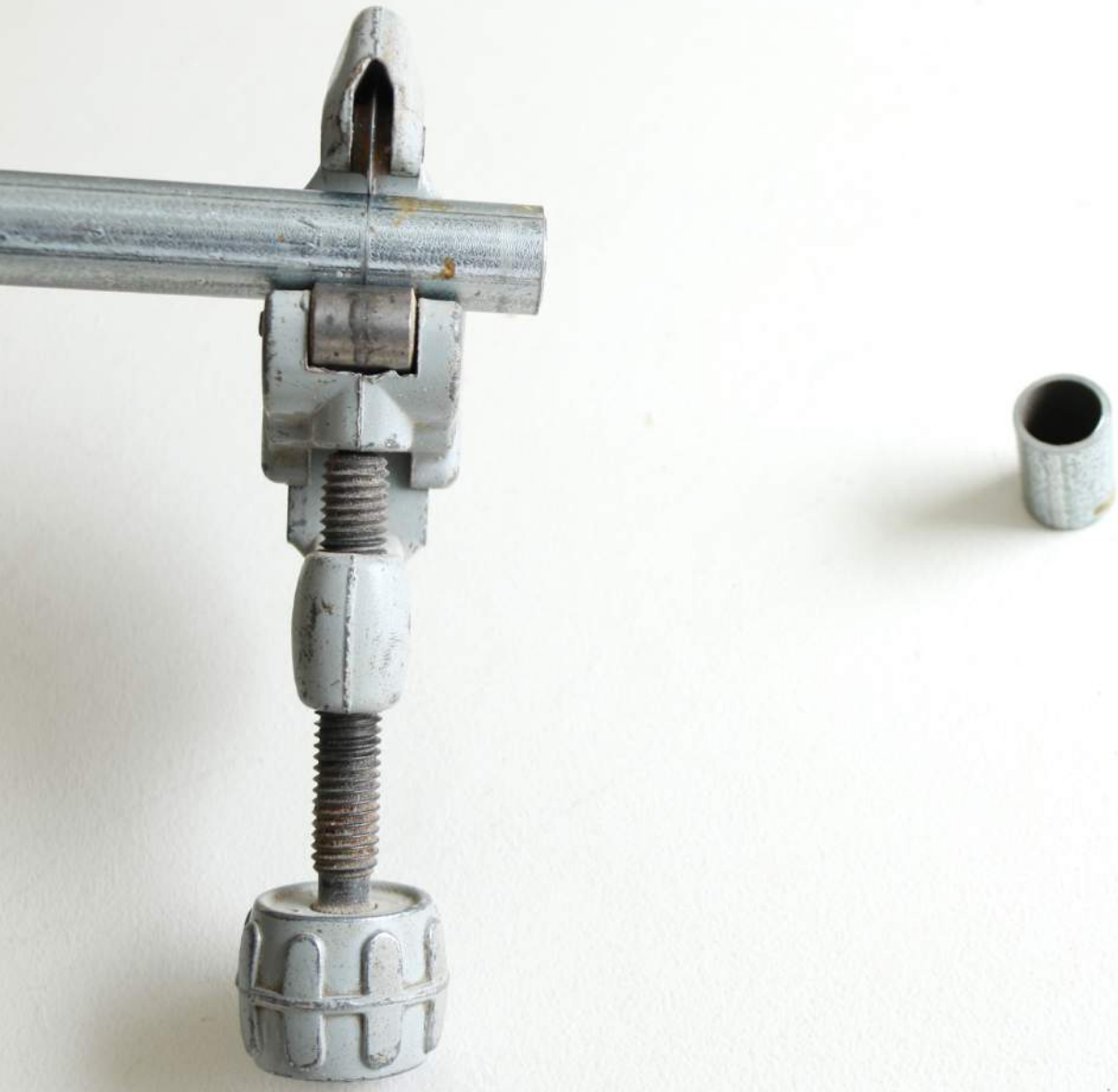
Securing the door track using lag bolts will require that you are securing to existing wall studs or to a door header that is already in place.
Another choice is to install a header board using carriage bolts that are countersunk onto the back of the header board which is then anchored to a wall to hold the track.


lag bolt
1/4" lag bolt
3/16" thick
distance as required
washer


electrical conduit
1/2"
TBD
1/2 outside diameter
3-4" long
9322
random
washers
1/4"
making it happen


1/2" metal electrical conduit
1/2"
Spacer
pipe cutter
a few details


metal electrical conduit
1/2"
to be determined by space between door tracks + wall
1/2"
cutting your lag bolt
spacer for the



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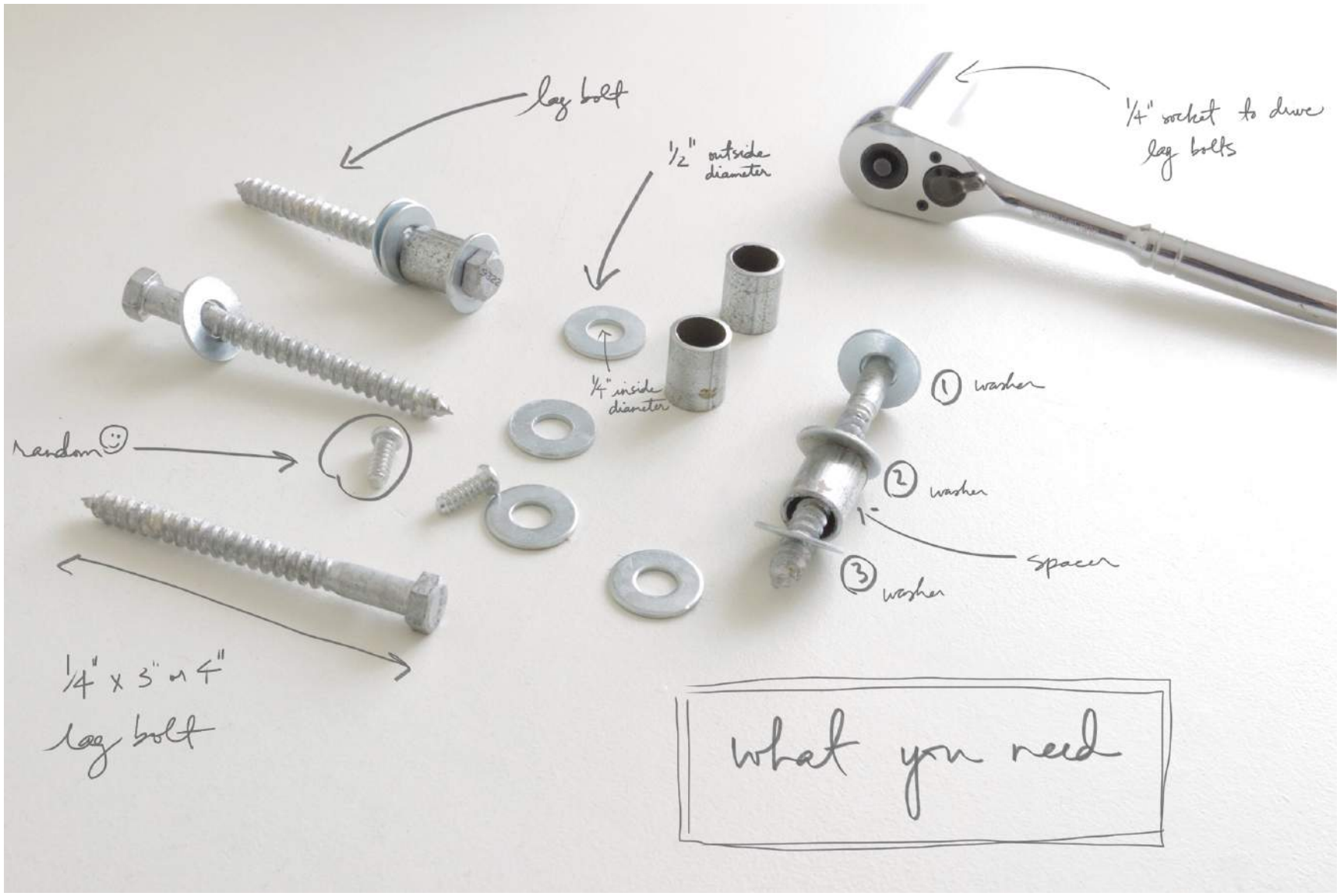
SPACERS & SCREWS

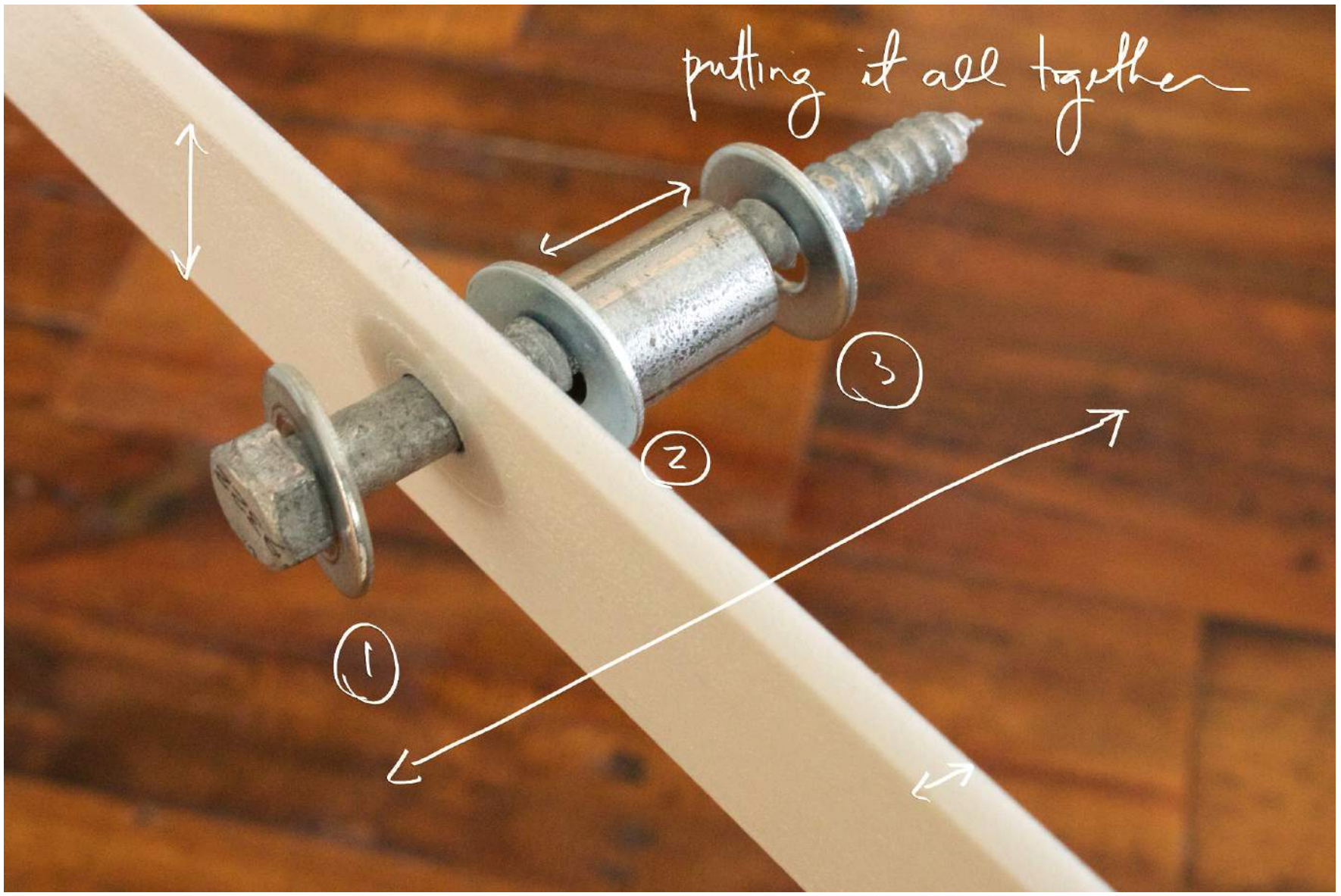
Spacers to bring the track out from the wall (this length can vary per project)

We used ½” metal electrical conduit and cut it to the desired length using a plumbing pipe cutter.

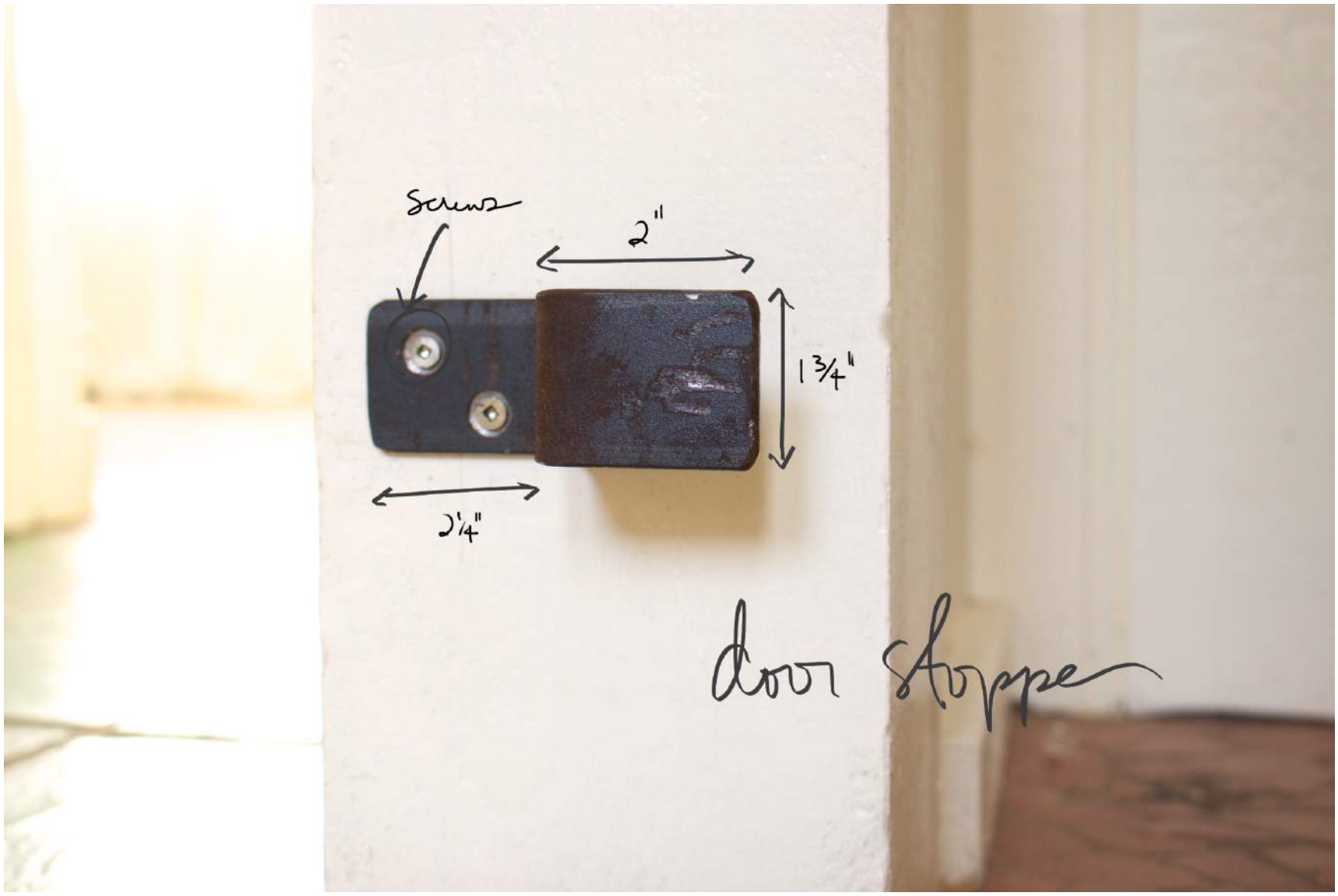
You will also need three washers for each lag bolt with spacers.



Ideally, washers should be ½” outside diameter to match the size of the metal conduit and ¼” inside diameter to go over the lag bolt.



Another choice is to use a big stack of washers instead of the conduit.



Screws Needed:

4- #8 (1.5”) black screws to secure the door stops to the wall.

6- #8 (1” to 1.5”) black screws to secure the hanger to the door

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PLANNING & INSTALLATION

DESIGN THE LIFE YOU WANT TO LIVE

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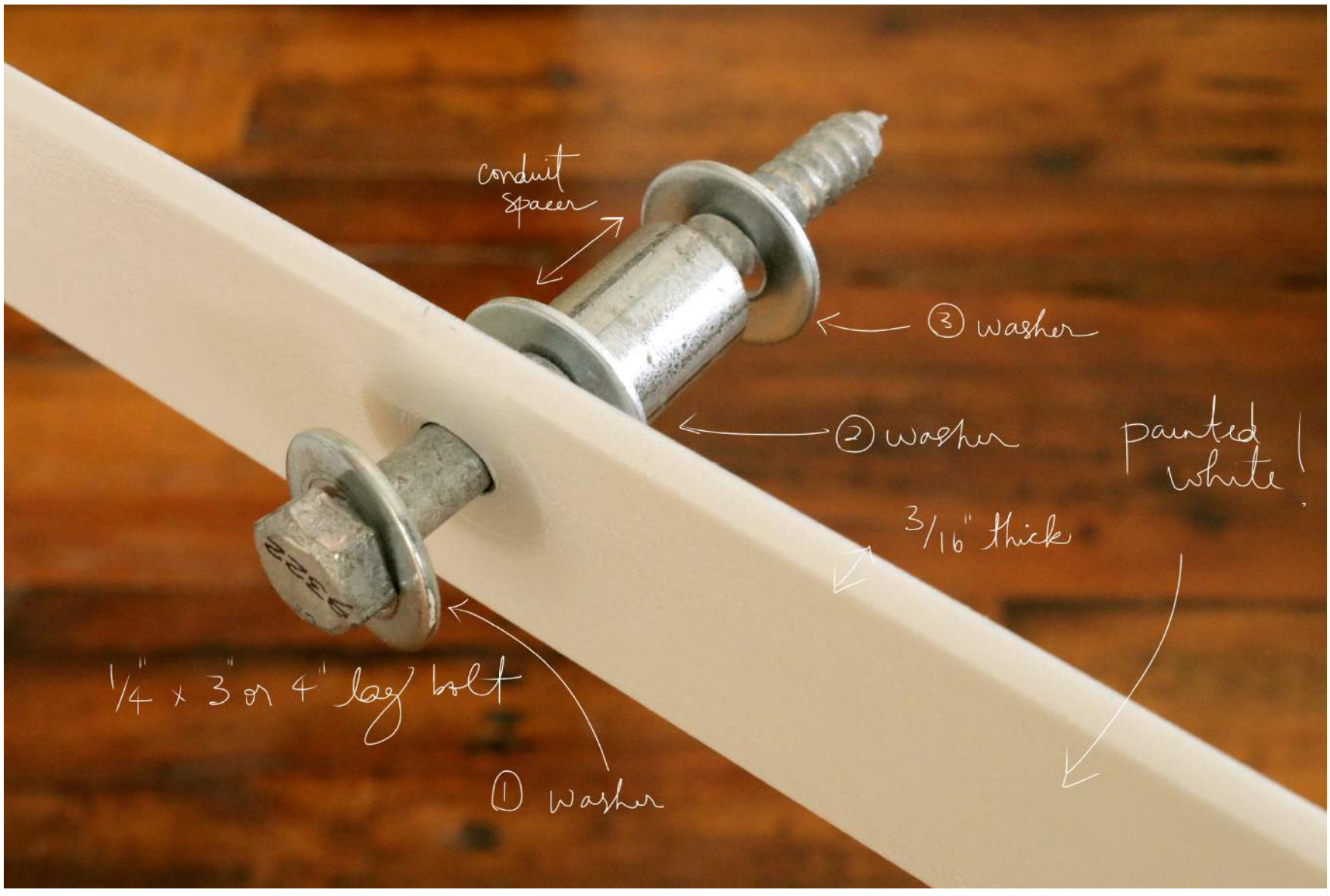
PREPARING THE DOOR TRACK FLAT BAR

We suggest you use 3/16” x 2 or 3/16” x 1 ¾” inch flat bar. To calculate the length you need, double the width of your door and add up to 6 inches to give you some extra motion room, if desired.

Identify the exact location for the placement of the bar and mark the bar for the location of the studs you will anchor to. The door track will need to be drilled for the lag bolts.

Drill 4 to 5 3/8” holes in the flat bar to correspond to the location of your studs for the lag bolts. Drill holes along the center of the bar. Note: In the event you use a track that is narrower than 1 ¾”, you may need to drill the holes below center to make sure the wheels have ample room to roll above the lag bolt.



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PREPARING THE FLAT BAR HANGERS

Use the same 3/16” flat bar you are using for your door track. A 12” length is common for each hanger and you can vary it based on the door or your preference.

You can bend the flat bar hangers yourself if you have a heavy vice and a big hammer. Ideally, you can ask a metal fabricator to bend the hangers for you.

In some cases (depending on the door thickness and the spacing of the door track from the wall) you may not have to bend the flat bar hangers. You can use them straight. (as shown below)

Drill the holes first:
Center punch where the hole will go so that you will have an indent for where you will drill.

Drill the top of the hanger to accommodate the wheel. The hole needs to be 5/8” wide to fit the bearing of the wheel.

We drill the hole 1” below the top of the hanger.

Note:
Drilling a 5/8” hole is difficult. You may want to have your metal fabricator drill these for you. If you drill the holes, center punch where the hole will go. Drill a ¼” hole first and then drill the hole to 5/8”.

You will need to mark drill spots to anchor the hanger to the door. We secure the hanger using three screws thus you will need to drill three holes if you follow our pattern. See the photo for an example of the drill hole patterns we use on the hanger.

We recommend you drill holes using a 3/16” drill bit and secure with a #8 or # 10 type of wood screw to secure the hanger to the door.

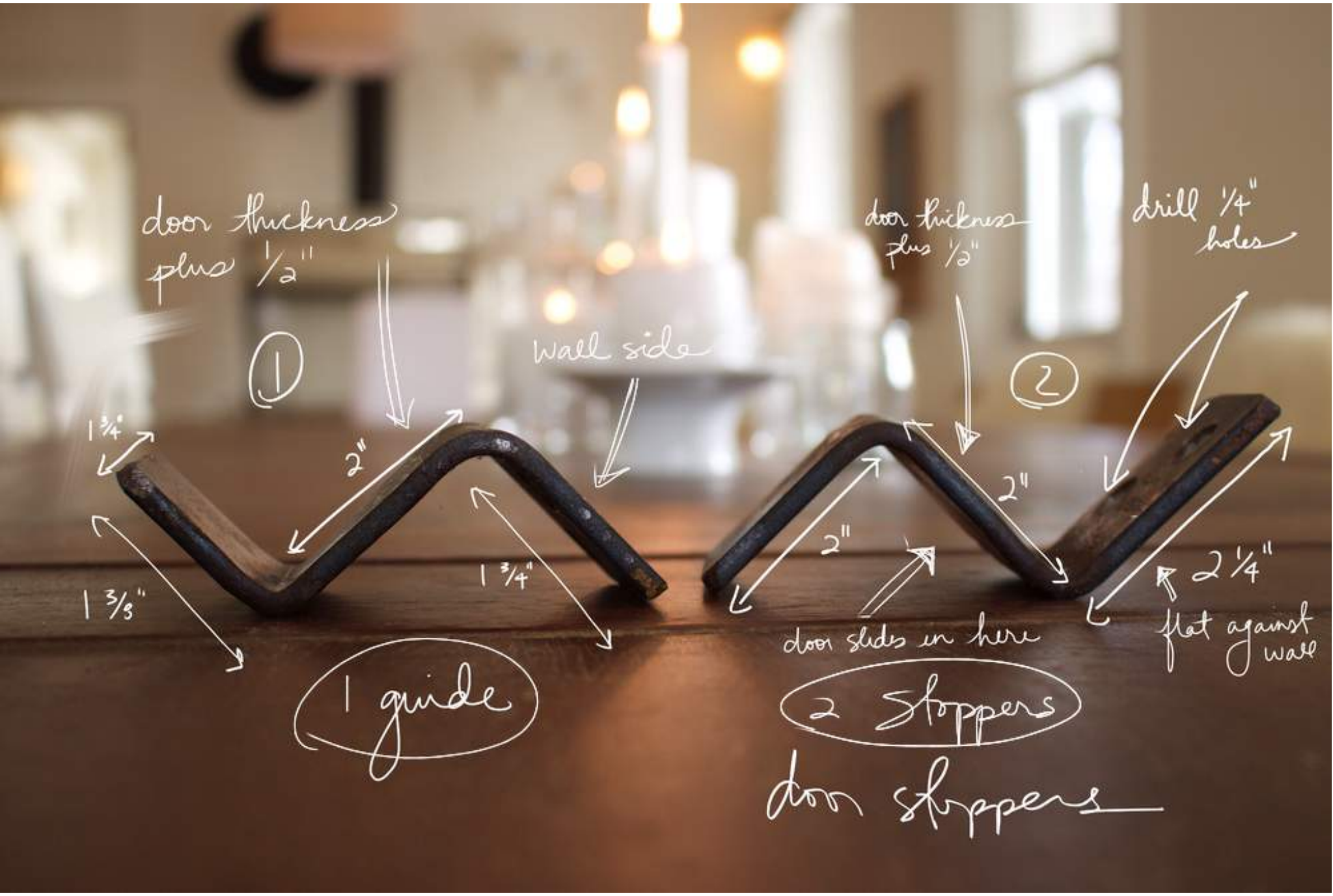
Note: Because you have not yet determined the precise location of the hanger on the door, be sure to drill the top hole low enough to give you room to adjust the height of the hanger up or down.

You should countersink the holes on the front side of the hanger so the screws lay flat when you install the hanger.

Counter sinking is done by using a ½” drill bit and drilling only partially into the metal to be able to seat the screw flat with the surface of the metal.

With some applications, you can use the hanger with the bend going in the opposite direction shown in the photo. Your installation will dictate which works best.

If you are bending the hangers, make the first bend on each hanger 4” from the top of the hanger. Make the second bend at 6” from the top, in the opposite direction.



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PREPARING THE DOOR STOPS AND DOOR GUIDE

You can use the same 3/16” flat bar to make your door stops and door guide.

For the door stoppers and door guide, measure the thickness of the door and add ½” to calculate the correct width to accommodate the door .

Note: the photo above in diagram 2 says 2” for the door stopper width. That worked for our size of door.

For your door stopper, add the three lengths to calculate the total flat bar length before bending.

For example, in our case… 2 1/4” + 2” + 2” = 6 1/4” flat bar length before bending.

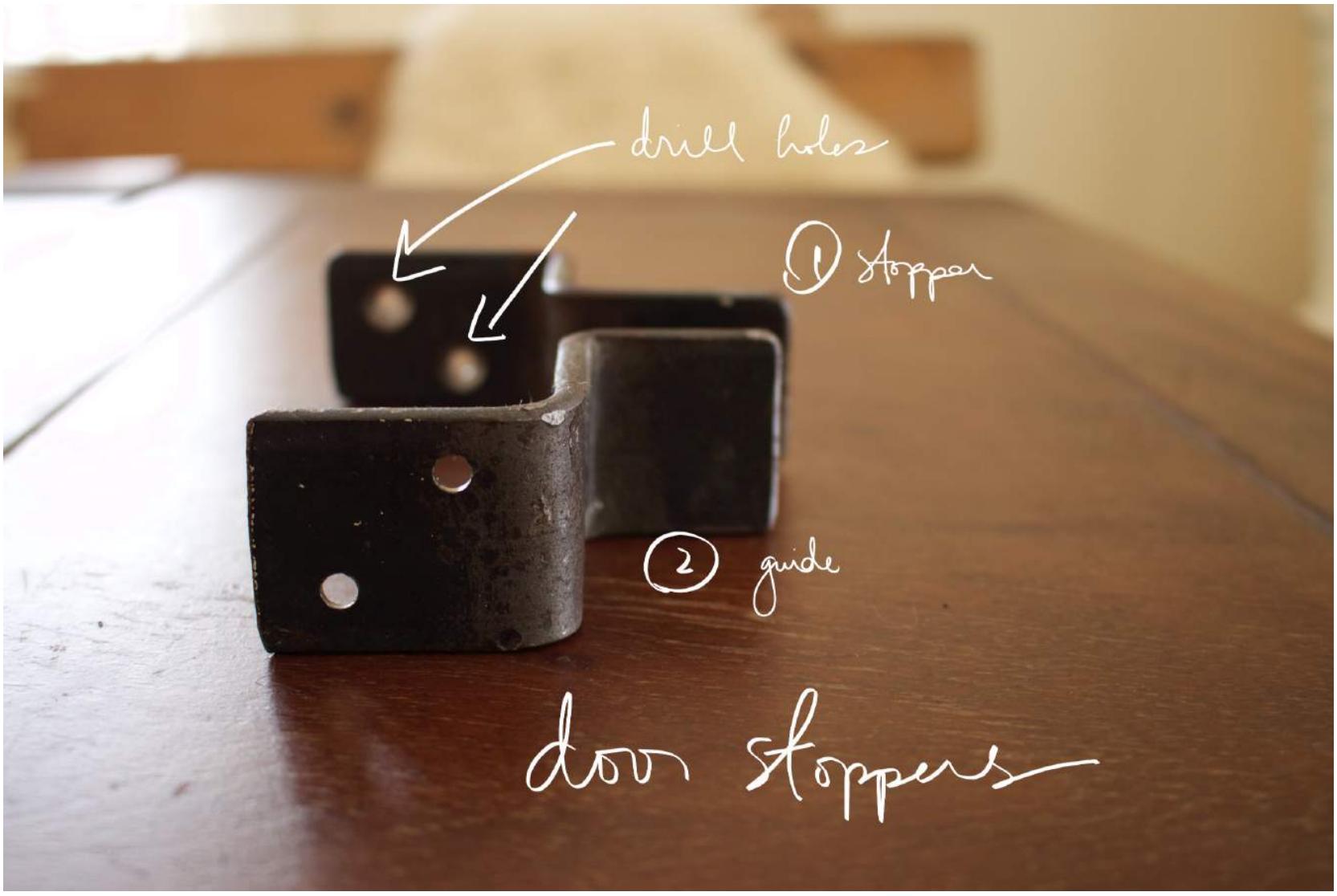
Follow the same process to make your door guide.

Note: We do not use door guides for all our installations. In some cases, we also only use one door stopper.

Mark the door stoppers and door guide with the location of where you want to drill the holes for anchoring to the wall. Drill two 1/4” holes before bending the flat bar.

Bend the flat bar into a Z shape.

Note: It is very difficult to do this bend using a vice and hammer. It is much easier for a metal fabrication shop to do this using a mechanical device.


drill holes
① stopper
② guide
door stoppers


guide


door stopper
guide


guide


door stopper

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PREPARING THE DOOR TRACK SPACERS

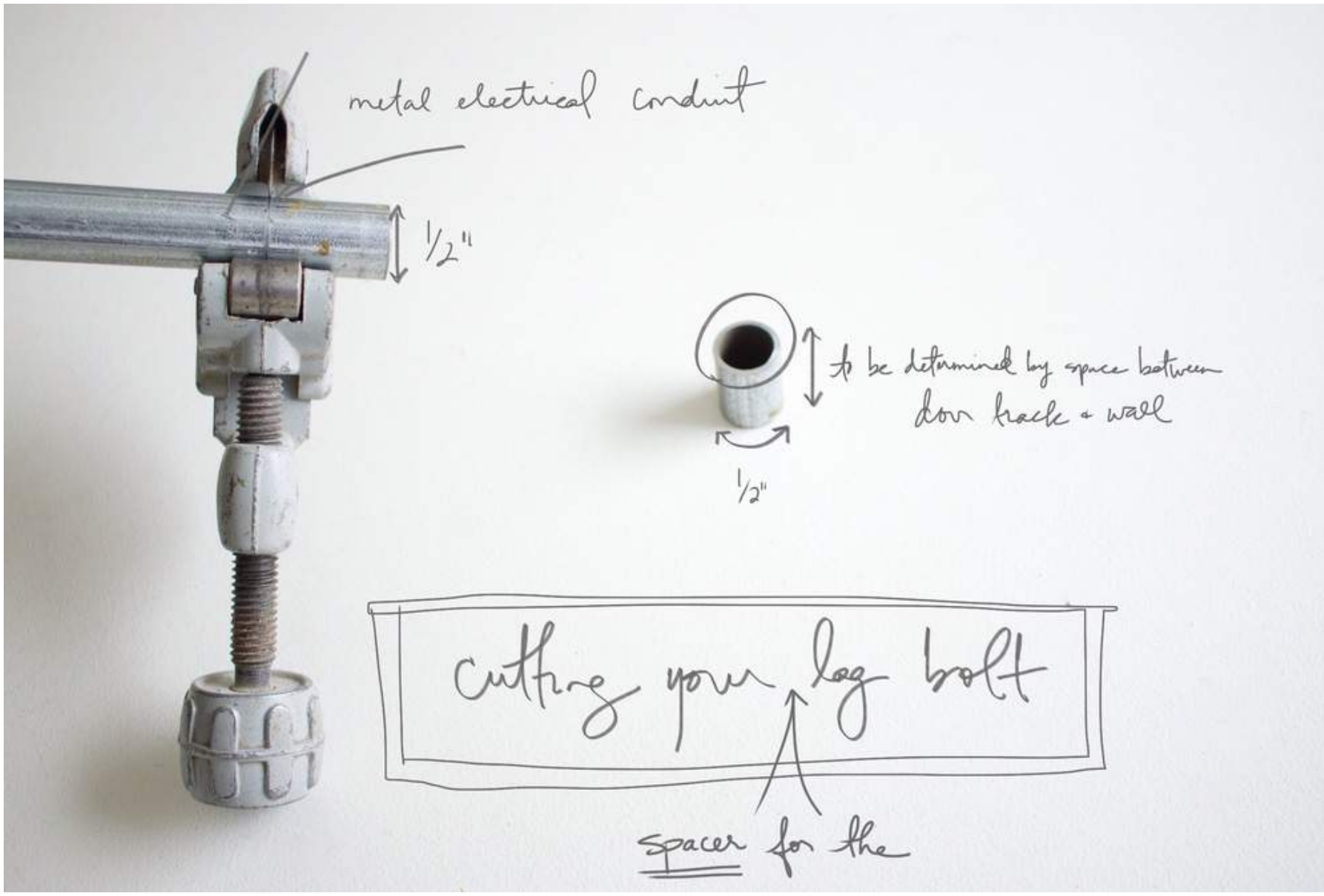
Prior to installing the door track with the lag bolts, you must determine the length of the spacers you want to use to extend the door track from the wall.

In order to calculate this, you will need to determine how far the door needs to hang out from the wall.

You want your door to be able to roll freely and clear any trim or mouldings that may protrude from the door surface.

Cut one spacer for each lag bolt you plan to use to anchor the door track to the wall.

Cut the metal electrical conduit tubing using a plumbers pipe cutter to get a good clean cut.



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INSTALLING THE DOOR TRACK

The next step is to install the door track using lag bolts screwed securely to the wall.

Give consideration to the height of the door in determining the final install location of the track.

Remember the door hangs ½” to ¾” below the bottom of the door track. We normally leave ½” to ¾” between the bottom of the door and the floor.

Some doors may need to be cut off at the bottom in order to fit well to your door opening.

1. To calculate the height to the bottom of the track, add together the total height of the door plus the desired clearance for the bottom and the top of the door.

2. It is most important to make sure your door track is **level**.

3. When ready, place a level on the door track and start by marking the placement of the lag bolt to the wall.

4. When you're confident you're in position, install the lag bolt at one end of the track.

5. Some installers like to install the center lag bolt first to help balance the track if they're installing alone. It also can make leveling a bit easier.

6. Remember to follow the right sequence : Put a washer on the lag bolt and put the lag bolt through the door track, then through a washer, the spacer, and another washer and secure it to the wall.

7. Do not over tighten to start.

8. Next, install the lag bolt at the other end of the door track making sure you are level.

9. Follow the same sequence with lag bolt, washer, door track, washer, spacer, washer, wall for the remaining lag bolts.

10. Finally, secure the remaining lag bolts with the washers and spacers and tighten them all securely to the wall.

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ATTACHING WHEELS TO THE FLAT BAR HANGER

HOW TO ATTACH YOUR WHEELS TO THE FLAT BAR HANGER

1. Secure each wheel to the hanger using a 5/8” x 2 ½” bolt.

2. From the rear of the hanger, place the bolt through the wheel, then attach your first nut and secure it tight by hand or lightly tight with a wrench.

3. Do not over tighten this nut since the bearings are friction fit and glued and the seal can be broker if over tightened.

4. Next, place the bolt through the hanger and secure it to the hanger with a second nut.

5. Tighten the outside nut with a wrench to firmly secure the wheel to the hanger against the inside nut.

6. If desired (for looks/appearance) you can cut the extra bolt length protruding past the second nut using a hacksaw or a grinder.

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ATTACHING THE FLAT BAR HANGERS TO THE DOOR

Depending on your door style (i.e. the placement of mouldings or glass), locate the distance from each side of the door that works well to install the hangers.

Our hangers tend to be 1 ½” – 2” from the outer side of the door to the outer edge of the hanger bar.

Once you have located the placement of the hanger from the outside edges of your door, you must determine the final placement to properly get the door height correct when hung.

Remember you will need ½" – ¾" clearance between the top of the door and the bottom of the door track.

We usually leave ½" – ¾" of clearance between the bottom of the door and the floor.

Care must be taken to install both wheels at exactly the same height above the door to ensure the door hangs level.

To calculate the height of the placement of the hanger on the door, hold the wheel with the attached hanger on the track so the wheel is straight.

Measuring down from the bottom of the track, add your desired clearance to the top of the door, and mark the hanger for the spot that lines up to the top of the door.

Install the hanger.

Note: some old doors and not perfectly straight. As such (assuming we have two people) we rough install the door on the track with the one hanger in place and proceed to mark the height of the second hanger.

Take the door off of the track and secure the second hanger with the screws.

Voila!!

You did it!!

CELEBRATE!

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INSTALL THE DOORSTOPS

HOW TO INSTALL THE DOOR STOPS AND DOOR GUIDE

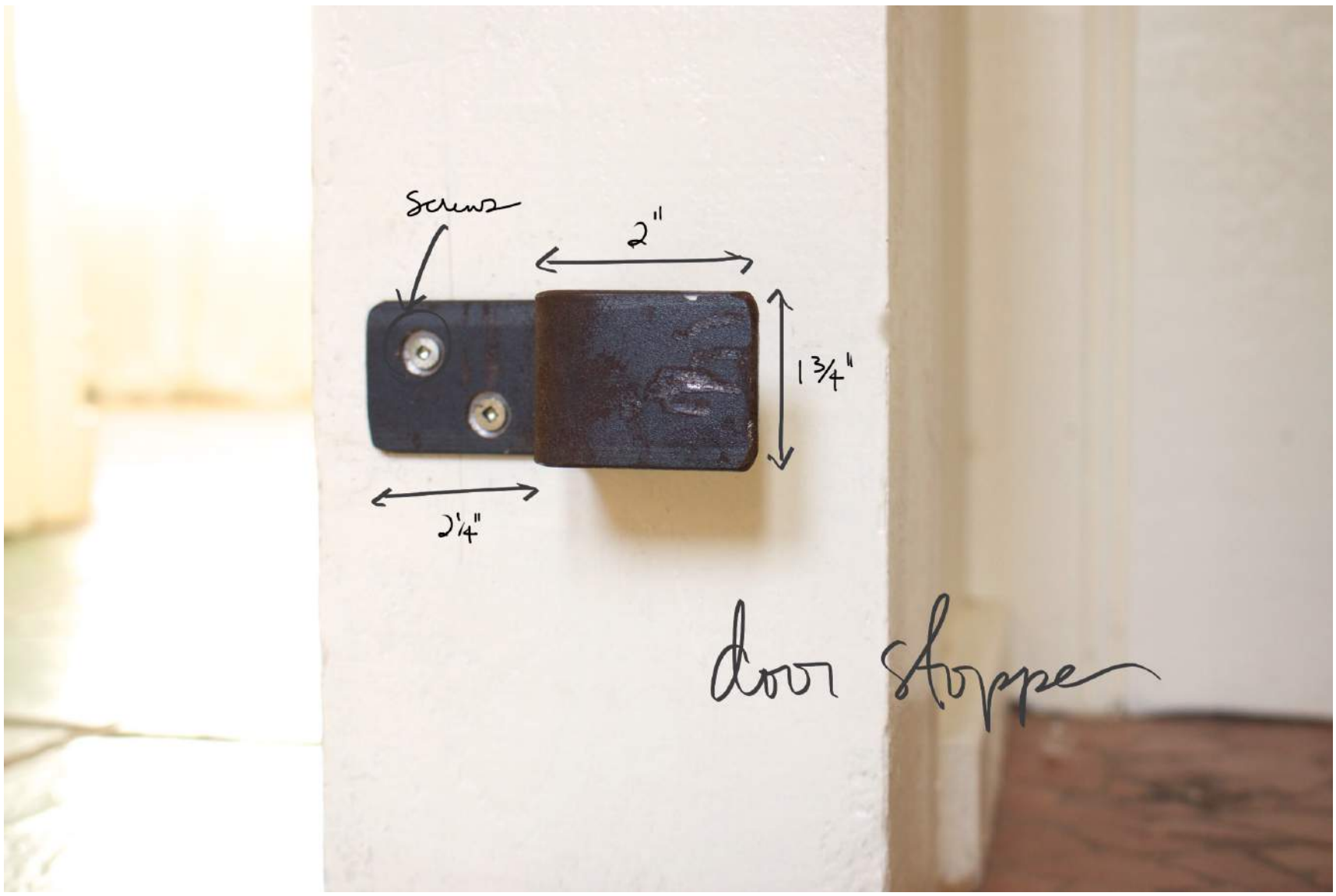
1. Position the door on the track in the fully closed position.

2. Hold the door stopper in place and mark the position for the screws.

3. Secure the door stopper to the wall using screws #8 1”- 1.5” screws.

4. Position the door in the fully open position, hold the door stopper in place and mark the position for the screws.

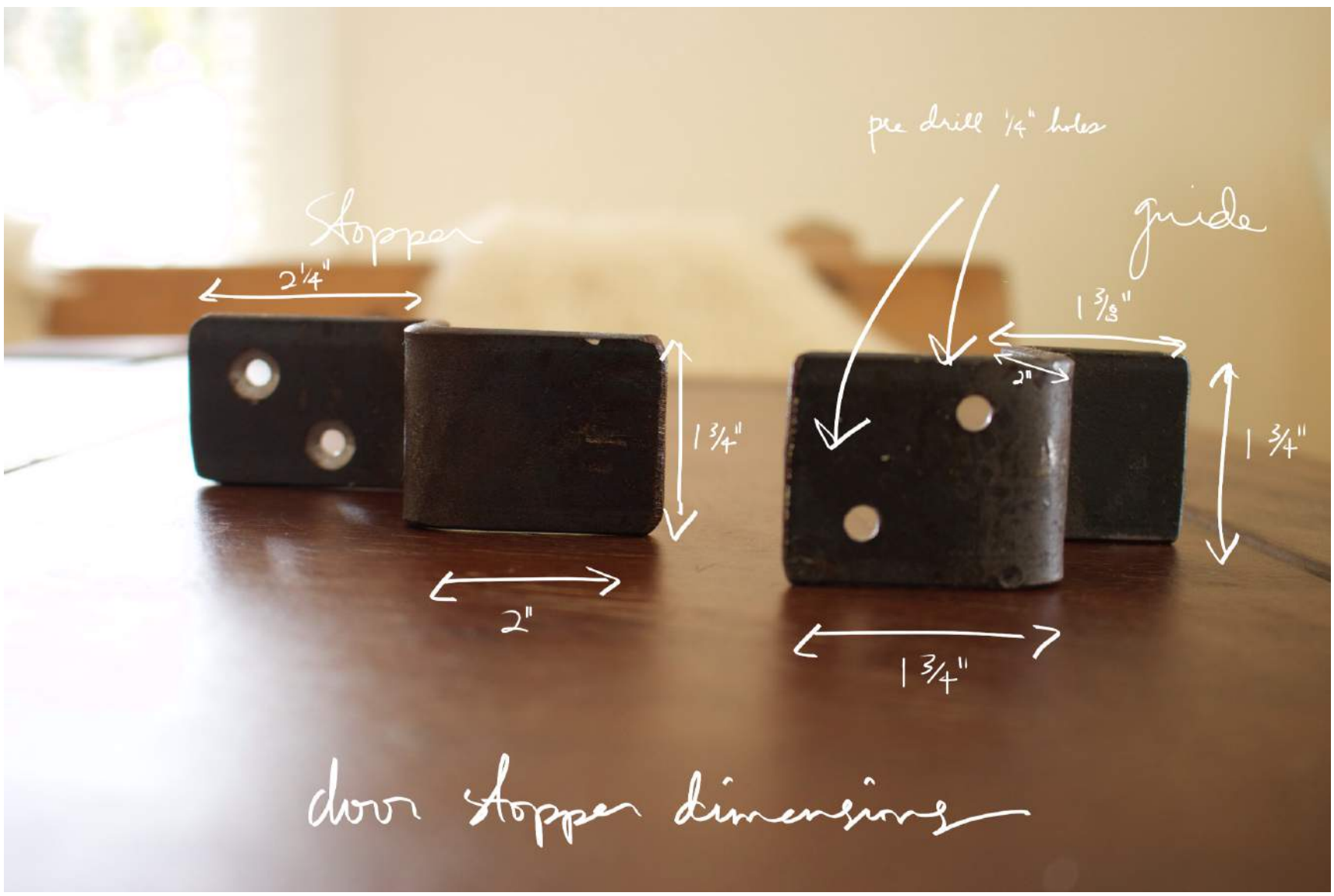
5. Secure the doorstopper to the wall.



6. For the door guide, select the best install position at the bottom of the door making sure the door is always running over the guide while opening and closing. Secure the guide to the wall using #8 1”- 1.5” screws.

TIP:

If your door stopper or door guide is slightly tight for the door (with a 90 degree bend), hammer down on the metal to open the angle to catch the door.



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ADMIRE YOUR WORK

DESIGN THE LIFE YOU WANT TO LIVE


TOILETTE

from me to you...

THANK YOU!!

LET'S GET SOCIAL !!

Click to tweet and share : A free DIY door track hardware tutorial !

Email me to personally get in touch with me

Click here to purchase the gorgy gorgeous wheels

See more examples of door track hardware installs here on Pinterest!

Say hello and share your projects with me here on Facebook

I'd be über grateful if you would share the insta love and follow me here on Instagram.
I share lots of free ideas for your home and funky inspiring messages :) Woot woot!

A big **thank you** for purchasing this book. I am so very grateful for you!!

THANK YOU from the bottom of my heart.

DESIGN THE LIFE YOU WANT TO LIVE