ISSN 1945-1342



20

DREGS FROM THE KEG

April 2013





In This Issue

Foam at the Top 2
San Diego Road Trip 3
Competition Calendar 5
Spent Grains 6
What's on Tap? 7
Strand Brewer of the Year
Cigar Powered Yeast Stirrer9

Foam at the Top

<u>Rives Borland</u>, Strand President

We had another great meeting in March. Mike Haisma led us through some excellent tips on brewing extract beers. Hopefully this has inspired everyone to bring a beer to the club meeting on April 10th to be judged for the May Club Only Competition (COC).



Mike Haisma on Extracts

The San Diego bus trip to the American Homebrewers Association Rally at Stone Brewing Co., White Labs, and Societe Brewing was awesome! I was really impressed with the quality of all the beers at the March Madness Competition at Stone. There were some particularly great beers from the other LA clubs like Yeastside Brewers. I received some compliments from a bunch of strangers on my Witbier, but ultimately I think it was not quite intense enough flavor-wise to stand out in a sample size pour. In the end, a nice Pineapple (Editor's Note: or Coconut) IPA ended up winning.

At White Labs we took a tour of the facilities and were able to sample many flights of the same base wort style fermented with different strains of yeast. I found out that even after four months, White Labs claims that their tests have shown viability doesn't drop below 90% for properly stored yeast. So some of the online calculators that assume a linear degradation in viability are very conservative. A few of us were also able to trade in our used vials for some cool swag like sweatshirts and style books.

Societe had a lot of good Belgian Style Ales, particularly an Amber. I also picked up a very cool stainless steel growler. I want to thank Tammy again for organizing the trip. She has been doing an excellent job so far this year as events coordinator.

Next on the horizon is a club brew at Steve Fafard's place on Saturday April 6th at 10AM. More details are given in the What's On Tap section below. Then there is the April club meeting. In addition to tasting any extract beers for the COC, Jim Wilson will be giving a presentation on yeast history, biology, and have a practical discussion about managing the environment that yeast works in while fermenting a batch of beer.

California Homebrewers Association (CHA) memberships are now on sale for \$50. Remember, you have to be a CHA member in order to attend the Southern California Homebrewers Festival (SCHF) at Lake Casitas (near Ojai) on May 3rd and 4th. And you cannot purchase memberships at the gate. We have reserved plenty of camping space, so let me know if you plan to attend and I'll save a spot for you. The style for the Bragging Rights Only Competition this year is wood aged beers. I think our Cabernet Barrel Aged Dark Sour ale would make a strong contender. I also have a rum barrel aged Russian Imperial Stout that is very tasty. If you think you have a great barrel aged beer, then please bring it to the April meeting and we will choose an entry to represent the club at the SCHF. As part of the festival we will be setting up our bar and serving our homebrews. To get organized for that we have started a general keg signup sheet. So if you want to contribute, please take look and sign at: https:// а up docs.google.com/spreadsheet/ccc? key=0AtwIN7R08tA7dE1aQlhYMmV4VXpKWkwt OTYtVEx2blE#gid=0



The Club Bar at the 2012 SCHF

Lastly, I want to mention that there are lots of competitions coming up and opportunities to enter or judge, including the NHC first round and the Mayfaire. Check out the Competition Calendar section for more details.



San Diego Road Trip 2013 By lim Wilson

Kudos to Tammy for a fun outing! She did a great job worrying about the details and herding us around. If you missed it, go on the next one if you can. If it's as well organized as this one, you'll like it.

I picked up Rives, Heather and his Dad, Miles, a little early to allow time for Rives to be Rives. Best laid plans notwithstanding, it was the usual morning cluster; bottling Dry Stout for the trip, collecting water, breakfast and a huge bag of empty White Lab vials to trade for swag. He also chilled and managed to forget two commercial bottles of beer in the freezer, setting the stage for a massive fail.



We Toured in Style

The bus left a bit late due to one guest's confusion about which train station was home base. Of course, it would have helped if Tammy's preview email had been read. Some slack was built into the schedule, so the delay didn't hurt. 15 got on the bus in Redondo and 16 in Long Beach. The riders were from at least four different clubs – Strand Brewers (of course), Yeastside Brewers, Maltose Falcons and Long Beach Homebrewers.

Breakfast was bagels and cream cheese washed down with brown ale, Rives' stout and Jay's blueberry mead. Breakfast of Champions! There was less beer than usual on the bus, which was probably good as there was plenty available during the day.

Our first stop was the American Homebrewers Association Rally at Stone Brewing Co. The draw was a \$5 discount on one-year or \$10 off on the already discounted three-year AHA memberships. That and free beer of course! We got through the registration gauntlet by 12:45pm which was perfect as a beauty contest for 30 home brews started at 1:00pm. The rally was held in the one acre beer garden, which was recently honored as one of the best ten in the country. Stone's restaurant is at Sierra Nevada's quality level and shouldn't be missed if you're in the area.



Stone Brewing World Bistro and Gardens

One and a half hours were allotted to taste the contest beers before voting. Power judging made it just possible to cover the field. The entrants all had some creative twist and varied from session strength Vienna lager to Imperial Palate wrecking spicy beers were whatever. popular. My favorites were Rives' chamomile, elderflower, coriander and mandarin zest Wit. a double oat India Pale Lager, a cucumber Saison and an imperial bourbon vanilla California Common. The winner was the brewer of a coconut IPA, who will have his beer brewed at Stone. I tasted this one twice and never did find a shred of coconut under all the hop character. Shows you what I know.

Lunch was either a rushed sit down in the brewery's restaurant, or a brat steamed in Arrogant Bastard at a snack stand in the beer garden. I opted for the brat and thought it was tasty. After voting, Tammy and one of our lady guests were among the raffle winners and the contest winner was a Yeastside Brewer member.



White Labs Beer Offerings and Tributes

Next stop was White Labs. A short but fact filled tour of their propagation plant viewed through windows to maintain its sanitary condition. The tour was sandwiched between tastings of beer groups fermented using different yeasts, which was a good learning experience. I traded 80 White Lab vials for a hoodie and Rives won the club championship by trading 110 for a hoodie, book and a voucher for more yeast.



Jim Wilson and His White Labs Swag



Societe Brewing's Tap Room

Our last stop was at Societe Brewing. Only one year old, their props are brewers who formerly worked at Russian River and the Bruery. They had seven beers up with the Devilicious food truck offering dinner. I opted for tasters of Belgian Pale and Amber and an Imperial Stout followed by a crab cake sandwich with a full pour of Belgian Strong Gold. The last one was the best one I had all day and it was a good place to stop. About this time, I heard that one of Rives' neighbors rescued his beer that was trapped in the freezer that morning. Oh, what a relief!

The two-hour ride home was boisterous and happy, fueled by our intake during the day. Notice there weren't any comments about the bus ride itself? That's because it was invisible just like it should have been. No issues or problems, just a comfortable, safe ride. Many thanks to Alex, our driver, and the Tour Coach Company.

Competition Calendar

Jeff Sanders, Strand Vice-President

Club-Only Competitions

Strand Brewers Club Meetings. Second Wednesday of most months.

Time: 7:00pm.

Entries to be submitted on behalf of the Strand Brewers Club will be determined in a tasting at the club meeting the month before entries are to be submitted for the competition. For more information on club-only competitions, go to http://www.homebrewersassociation.org/pages/competitions/club-only-competitions

May 2013 Extract Beers Entries Due May 13th. Judging May 18th. Entry Fee: \$7. Hosted by Stan Backlund and the Hangtown Association of Zymurgy Enthusiasts club of

Association of Zymurgy Enthusiasts club of Placeville, CA. This covers BJCP categories 1 through 23 where 50% or more of fermentable sugars come from malt extract. For more information contact Stan Backlund at backlunds@comcast.net

August 2013

TBD

Entries Due TBD. Judging TBD. Entry Fee: \$7. Hosted by Tom Folster and the Hudson Valley Brewers club of Millbrook, NY. This covers BJCP category TBD.

For more information contact Tom Folster at <u>vp@hvhomebrewers.com</u>

September/October 2013

European Amber Lager

Entries due TBD. Judging TBD. Entry Fee: \$7. Hosted by Rick Franckhauser and the Cincinnati Malt Infusers club of Cincinnati, OH. Covers BJCP category 3.

For more information contact Rick Franckhauser at <u>franckenbrew@yahoo.com</u>

Local Competitions: in order of entry deadline

Arizona Mead Cup Phoenix, AZ Entries due April 9th. Judging April 20th. Entry fee: \$8. Contact: Sonja Lockhart. Phone (602) 770-1535. Email: <u>meadlady@gmail.com</u>

San Diego International Beer Competition Del Mar, CA Entries due April 12th. Judging May 18th. Entry fee: \$40. Twelve entries maximum. Contact: Kate Phillips. Phone (858) 792–4245. Email: <u>kphillips@sdfair.com</u>

Mayfaire Homebrew Competition Woodland Hills, CA Entries due April 19th. Judging April 27th. Entry fee: \$8. Contact: Ed Kochanowski. Phone (818)

917-2467. Email: egk@att.net

Annual Chico Homebrew Competition Chico, CA Entries due April 20th. Judging April 28th. Entry fee: \$7. Contact: John Abbott. Phone (530) 345–9656. Email: JABREW@aol.com

Alameda County Fair Homebrew Competition Pleasanton, CA Entries due April 27th. Judging May 11th. Entry fee: \$7. Contact: Roger St. Denis. Phone (408) 225–5834. Email: <u>meadguy@yahoo.com</u>

Orange County Fair & Event Homemade Beer Competition Costa Mesa, CA Entries due May 3rd. Judging May 18th. Entry fee: \$5. Contact: Julie MacRae. Phone (714) 878–1555. Email: j_macrae@ocfair.com

Santa Clara de Asis 5th Annual Homebrew Competition Yorba Linda, CA Entries due May 5th. Judging May 10th. Entry fee: \$5. Contact: Jennifer Flores. Phone (714) 878-2505. Email: jennyjeny@aol.com

Hanger 24 4th Annual Homebrew Competition Redlands, CA Entries due May 5th. Judging May 11th. Entry fee: \$5. Contact: Kevin Wright. Phone (909) 389–1400. Email: <u>kwright@hanger24brewery.com</u>

Many more competitions going on around the country and around the world so..... Go to <u>www.homebrewersassociation.org</u> for a complete list.

For a complete list of BJCP competitions, go to http://www.bjcp.org/apps/comp_schedule/ competition_schedule.php

Spent Grains

Brian Kellough, Strand Treasurer

We enter April with about \$3,300 in the bank. Inflows included \$365 in dues and \$60 in raffle money from the March meeting. We have some great prizes coming up at the raffles, so get your tickets at the meetings and let's have a great year for the raffle! We have 37 paid memberships, including six new members: Eddie Martinez, Eddie's Wife, Steve DeHart, Charles Thacker, Hunter Thacker and Rick Pearce. Welcome to the club! I still need applications from Christian Simms, Kelly Simms, Eddie Martinez and Eddie's Wife. You can fill it out electronically and just email it now! <u>Click here</u>. Lets keep up the good work, and spread the word about our club and the benefits it provides!



Raffle Prizes

To get reimbursed for club expenses please bring receipts to the meetings and I'll write you a check or scan your receipts and email them to <u>treasurer@strandbrewersclub.com</u> and I'll send you a check through online billpay.

Membership Renewal Time!

We have 26 members from 2012 who have not renewed yet. Don't forget that dues for 2013 are due. Dues are \$35 (\$37 through paypal) for individual membership and \$45 (\$48 through paypal) including a spouse. TO MAKE IT EASIER FOR YOU, WE HAVE AN ONLINE PAYMENT OPTION THROUGH PAYPAL! Click It is nominally more here for information. expensive, but infinitely more convenient for all involved! If you don't like paying online, still fill out the application form electronically and email it, then just mail a check made out to "Strand Brewers Club" to me at 10890 Whitburn St, Culver City, CA 90230. You can also hand me a check or cash at the next club meeting (however, all applications should still be submitted electronically).

Attention returning and current members: If you think your contact information is different than what we have on file, please fill out the online membership application at the link above. It is a fillable pdf you can save and keep for your records. Annually we'll ask renewing members to check their forms and make sure the information is current.

What's On Tap

Tammy Minion, Strand Activities Director

March 29th through April 7th

IPA Festival Week at he Congregation Ale House, Long Beach. Deschutes Brewery and their Woody Mobile will be featured. <u>http://congregationalehouse.com</u>

April 4th

El Segundo Brewing Pint Night at Naja's – 8 PM. You keep the glass.

April 4th

Tenaya Creek Brewing Southern California Debut at Beachwood BBQ, Seal Beach – 6 PM. Tenaya Creek is a Las Vegas craft brewery.

April 6th

Club Brew – 10 AM. The club brew will be at Steve Fafard's house at 22 Rollingwood Drive, Rolling Hills Estates, CA 90274. We're brewing Pete's Brown Ale, which is somewhat of a tradition for our club to take to the SCHF. If you were already planning to brew on Saturday, bring your set ups and brew along with us.

April 6th

5th Annual LA Beer Festival at Paramount The LA Beer Festival will feature Studios. dozens of international and domestic beers, LA's most popular food trucks and two great bands. There will be two sessions: Noon to 3pm and 5pm to 8pm. Admission is \$40 and a percentage of proceeds will go to support Noah's Bark Animal Rescue. Parking is free. Tickets will not be sold at the door. Price unlimited pours includes and parking. Designated drivers can get in for \$15 cash only at the door. http://www.drinkeatplay.com/ labeerfest/

April 7th

El Segundo Brewing Bottle Release at Select Beer – Noon to 3PM. Two 5 Left (Double IPA) and Citra Pale Ale will be featured.

April 9th

House-Aged Clutch Beer Relase at Simmzy's, Manhattan Beach – 5 PM. Simmzy's aged New Belgium's Clutch (Dark Sour Ale) in-house for the past two years. The beer will be paired with a goat cheese souffle and presented with some of New Belgium's other beers: Clutch (aged since 2011), Imperial Coffee Chocolate Stout, Heavenly Feijoa Tripel and Cascara Quad (Belgian Quad brewed with dates and coffee cherries).

April 11th

Ommegang Night at Select Beer – 5 PM. Game of Thrones Iron Throne (Belgain style Blonde) will be featured. Other beers from Ommegang on draft will include 2012 Art of Darkness, Gnomegang (Belgian Strong Pale Ale) and Witte (Belgian Wit).

April 13th through April 21st

High Alcohol Beer Festival at Lucky Baldwin's. <u>http://www.luckybaldwins.com/</u>

April 30th

Queen's Day at Select Beer – 5 PM. La Trappe and Urthel will be featured.

May 3rd and 4th

Southern California Homebrewers Festival (SCHF) at Lake Casitas (near Ojai)

Last year over 1800 members attended the festival with 30 clubs pouring. This year Firestone Walker, Stone, Hollister and Taps will be serving their beers and answering questions on Friday night. The guest speakers for Saturday are Mitch Steele, the brewmaster at Stone Brewing and Gary Glass, the Director of the American Homebrewers Association. Memberships are \$50. To purchase a membership or get more info visit http:// www.calhomebrewers.org/

Strand Brewers Club has campsites available; please contact Rives to reserve a spot. president@strandbrewersclub.com May 4th

LA Vegan Beer & Food Festival at the Roxy Theatre – 1 to 5 PM. Unlimited pours of 50 beers from 25 breweries, local vegan food vendors and live music. Tickets are \$40 for general admission. For more information visit: http://losangelesvegan.com

May 19th

Taste of Hawthorne at Hawthorne Municipal Airport. The Strand Brewers Club will be providing help for the beer garden. We are looking for volunteers.

http://www.communityevent.org/

For even more exciting events visit: https://www.google.com/calendar/embed? src=t.ammy.minion %40gmail.com&ctz=America/Los_Angeles.

Strand Brewer of the Year Points Standings

Mike Haisma, Strand Communications

It is April Fool's Day, which means it is time to see how things went in March in the race for Brewer of the Year. As it stands now, I have rocketed into the lead with 24 points, with Jim Wilson following closely behind in second place and Hunter Thacker nipping at his heels thanks in part to winning "best beer" last month with his delicious and spicy Jalapeno Cream Ale. As your new points leader, I plan to rule with an iron fist and charge each of you a tax of at least one homebrew to be brought to the next club meeting. Violators will be lined up against the wall and subjected to a punishment of my choosing. It will involve beer and maybe some kind of dance number.

Here's how things stand currently on the leaderboard:

Name	Points
Mike Haisma	24
Jim Wilson	19
Hunter Thacker	11

Name	Points
Rives Borland	9
Ryan Penrod	6
Jeff Sanders	4
Steve Gardner Steve Dehart Nate Federman Jared Carson Bob Wilson	3
Steve Fafard Rick Wirsing Rich Thornton Lisa Cooper Lee Richardson Jim Hilbing Eddie Martinez David Eaves Charlie Thacker Adam Pike	2
Tom Kulzok Tammy Minion Rory Dewan Robert Hernandez Micheal Litsey Jim Webster Janet Fukumoto Graham Hebson Ethan Allen Doug Toperzer Christian Sims Charlie Wallace Brian Basye Brendan Binns	1

You can earn points by performing any of the activities on the list published in the January 2013 issue of the Dregs. If you need a refresher, please feel free to contact me and I'd be happy to send you the full list and associated points. The catch is that you need to make sure I know about your homebrewing-related activities or they won't be counted. The best way to do that is to make sure your name is on any sign-up sheets for the corresponding activity (if there is one), and for activities like entering or judging in competitions, you can

send me an email at communications@strandbrewersclub.com with some kind of documentation for that activity (e.g. confirmation emails, scoresheets, etc.). Please feel free to contact me if you have ideas for other activities, complaints about existing ones, or questions related to homebrewing or really any topic at all.

I strongly encourage our busier members to enter their homebrews into local competitions. This is something you can do which is easy to work around your schedule, and in addition to (usually) getting very detailed and useful feedback on your beers, if you happen to medal your points standing can improve dramatically overnight.



Interesting People at SCHF 2012

Cigar Powered Yeast Stirrer

Jim Webster, Home Brewer in Training

I started home brewing about 20 years ago while living in Florida, but consider myself a brewed-again home brewer. What does that mean, you ask? Although I brewed my overly carbonated first home brew quite a while ago, there haven't been any new batches since after the first three months. So, to say I have 20 years of experience is far from accurate . . . more like I dabbled in home brewing for a batch or two and am just now picking it up again, hopefully with "hoppier" rewards. This is why I consider myself brewed-again, starting as of the first of this year. All my previous equipment, including a pot and even a spoon, have all found new homes by now, so I've been restocking and setting up my home brewery piece by piece. I find this time very troubling, as I'm excited to brew my first batch, yet I have to wait for packages to arrive. Once they arrive I have to work out the kinks and get up to speed. The kinks I've encountered could be start-up for another article. I like to jump right in while also taking the extra steps to make a custom setup that feels like "mine." So, while waiting for my second burner to arrive (the first was lost by UPS), I was scouring the internet for other brewing ideas.

I wanted to start with a small setup yet have whatever I'd use to be custom built. After all, that is half the fun of home brewing . . . at least in my mind. I stumbled on some sites describing how to make a yeast stirrer as a DIY project. This was perfect . . . small, simple, and it allowed me to easily customize the project to my personal tastes.

I'm sure this is not the first time this idea has fermented nor has been completed by anyone in the brew club. So, this isn't anything revolutionary, but instead my take on a cigar box magnetic stirrer. What I like about this project is the ability to put my design stamp on the final product as well as provide a hands-on fun method to learn a little more about brewing. I learned quite a bit about yeast stirrers from this project that I probably would've just glossed over otherwise.

And thus, the DIY cigar box magnetic stirrer was born, also known as the Punch Stirrer for reasons which will become apparent. I'm still looking for a good name, but that will work for now. I realize the article title may be a little misleading, as the stirrer isn't actually powered by a cigar, but I assumed you figured that out pretty quick. Then again, if it wasn't for the cigar, there wouldn't have been a cigar box and thus no stirrer project housed in a cigar box. So, in a sense, the stirrer is powered by the simple cigar . . . although loosely.



Punch Stirer with Stir Bar - Front



Punch Stirrer - Back

Let's get on to the good stuff: How to build a magnetic stirrer or I should say, "How I build a magnetic stirrer." There are many ways to build this project, from the housing, to the components, to the power source. While I found many examples on the internet of stirrers housed in a cigar box, most were made using a cardboard or paper cigar box. These have thinner walls and are much easier to work with, so it makes total sense why they were chosen. I wanted to go the extra step and use one of my wooden cigar boxes that were lying around, so I choose a Punch Grand Cru cigar box. Thus the name "Punch Stirer." If you don't have a cigar box on a counter at home. you can stop by most any cigar store and pick from a wide selection for just a couple dollars each. I recommend this option to buying a box of cigars and having to wait until you smoke every last one . . . just takes too long.

When choosing a cigar box, whichever box strikes your fancy is the best one to choose. You can look at measurements and thickness, but in the end, whatever you pick will be the best option. After all, this is your project. Taking that into mind, measurements can be helpful as far as making the project a little easier to accomplish. The cigar box I choose was about 8"L x 5 ¾"W x 2"D, as measured from interior walls. It is important to measure the interior dimensions as that is where your components will be housed. The walls were 3/8" thick, which adds to the complexity of mounting the hardware. I'll get into why the thicker walls require some extra attention later on. When looking for a good sized container, I recommend choosing one with a fair amount of depth. 2" was deep enough, but 2½" would have made it much easier to store all the hardware within. For instance, I like to place the wall charger in the box when not in use, and since some of these can be pretty thick, a deeper box allows you to fully close it for simple storage . . . and it looks much nicer in the end as well.

The components needed to make a magnetic stirrer are easy to obtain, whether you choose to purchase or to acquire from your home scraps drawer. My cigar box stirrer is primarily comprised of: cigar box, wall charger, 80mm computer fan, strong magnets, power rocker switch, rheostat, a couple feet of wire and a stir bar. I have a few extra items such as electrical tape and adhesive pads, but those items I consider optional based on how you connect your components. The cost breakout for both the core materials and those that I consider optional are detailed in the cost breakout tables below.

Core Materials For Cigar Box Magnetic Stirrer	My Cost	Estimated Cost	Where to Purchase
Cigar Box	\$0.00	\$2.00	Local Cigar Store
Computer Fan	\$0.00	\$3.99	Amazon
18 gauge stranded hookup wire	\$0.00	\$7.99	Radio Shack
12V DC Wall Plug-in Power Adapter	\$0.00	\$6.50	Amazon

Core Materials For Cigar Box Magnetic Stirrer	My Cost	Estimated Cost	Where to Purchase
Machine Screws (4) - #8-32 2"	\$1.12	\$1.12	Home Depot
Machine Screw Nuts (bag of 12) – #8-32	\$1.18	\$1.18	Home Depot
Flat Washers #8 (bag of 30) – zinc	\$1.18	\$1.18	Home Depot
25-Ohm Rheostat (3 watt)	\$4.49	\$4.49	Radio Shack
Knurled Knobs (1" – 25mm) (bag of 2)	\$3.49	\$3.49	Radio Shack
DC Power Jack (Size M – Coaxial)	\$3.49	\$3.49	Radio Shack
Oval Illuminated Rocker Switch (30Amps)	\$4.19	\$4.19	Radio Shack
Rare Earth Magnets 3/8" Pack of 10	\$9.99	\$9.99	Amazon
	\$29.13	\$49.61	

Table 1. Material Costs

Extra Materials Possibly Needed	Estimated Cost	Where to Purchase
7/16" Black Oxide Drill Bit	\$6.99	Amazon
Basic 5 Piece Soldering Kit	\$10.99	Radio Shack
Electrical Tape or Wire Crimps	\$2.00	Radio Shack or Amazon
Adhesive-Backed Mini Wire Clips	\$2.99	Radio Shack
	\$22.97	

Table 2. Costs of Extra Materials

I broke the costs into two tables as the cost for any DIY project varies depending on what you already have in your tool chest. I had a soldering iron in the back of a drawer in the garage that hadn't been used for 10+ years, but it worked just fine. Otherwise I'd have had to shell out another \$11. Of course, soldering was just another choice in the build. You could use wire connectors and electrical tape, but I preferred to make the more permanent connection, plus I got to solder. This was fun, as I'm a software engineer by trade and we don't get to play with soldering irons too much at work. The main idea behind posting these pricing tables is to get an idea of what is involved and have somewhere to start when choosing your components. I had an old laptop fan laying around, which I tore apart and used the pieces for this build. That saved some money and also made it a little more home built.

Of all the components, I found the magnets the hardest to get just right. They were also the most expensive parts. Since the magnets were going to be attached to the top of the computer fan within the cigar box and the stir bar would be in the liquid vessel, they had to be strong enough to attract the stir bar through the 3/8" wood as well as the bottom of the liquid vessel, better known as the yeast flask. Yet, it couldn't be too strong, else the fan wouldn't spin.

I find talking to pictures/table/diagrams makes projects much easier to digest, so, let's take a look at the finished product first (the lid is out of picture while opened):



What's Inside

There are 4 main steps to building the magnetic stirrer:

- 1. Placement of components;
- 2. Drilling of holes for rheostat, rocker switch, and dc power jack;
- 3. Mounting of computer fan and attaching magnets; and
- 4. Wiring components together.

As you can see from my build out, the wires seem to be all over the base of the cigar box. I could have planned for this a little better, but I put more weight on where the switch, knob and power jack were to be placed on the outside of the box rather than consolidation of wires on the interior. After all, the box will remain closed during operation and storage. The only time I need to open it is to place the wall outlet

and stir bar inside for storage. I could have placed the rocker switch next to the rheostat, which would have resulted in all the wires residing on the right side of the box, giving the interior a much cleaner look, but then the would outside front panel look more cluttered . . . in my opinion. For the fan, I positioned it such that the center of the fan would like up with the center of the emblem on the outside of the top lid. In the first picture, the stir bar is placed where the computer fan is centered, which is about 1/2" from the true center of the box. I highly recommend positioning your components and hooking everything up before drilling holes to make sure the layout works.

Drilling holes almost doubled my construction time on this project. If you take a closer look at the DC power jack, you can see park of the interior wall has been broken off and if you look real close, you can see the back of the washer which, when tightened, holds the jack in position against the outside of the box.



Close Up of Recessed Power Jack Washer

For all three exterior components (switch, rheostat and jack), the 3/8" inch wall was too thick for the component to full be inserted. So, I had to drill a small recession where I could countersink a washer to secure the component. This of course seems easy enough to do with the right drill bit, except you don't have any clearance on the inside of the cigar box to use a drill bit, so I had to use a Dremel bit to carve out a recessed area for the washers to fit. Yet another example of how a simple project can become a little more complicated.

I chose not to drill holes in the bottom of the cigar box to mount the computer fan. Instead I simply placed the head of the screws on double-sided Velcro to secure it to the bottom of the box. One reason for doing this is for flexibility in case the fan broke at some time in the future and it became hard to find a replacement with screw holes in the same location. I'm sure it wouldn't be a problem, but I wanted to keep the look clean on the outside as well and I didn't have a drill bit which would allow me to flush mount the screws. I was also concerned as to whether this fan would do the trick.

I placed washers and nuts on both sides of the fan to make it easy to position the fan based on the magnets performance through the top of the lid. I had to cut off the top ¼" of each screw using the Dremel in order to fit in this cigar box. This will depend of course on how deep a box you start with. A 2" deep cigar box would have make this effort that much easier, by not requiring the screws to be trimmed.

The magnets are rare earth magnets which are extremely strong. These aren't your parents' refrigerator magnets! I double stacked the 3/8" magnets with opposing poles facing upwards. This provided enough magnetism to lock onto the stir bar on the outside of the lid, while not locking the fan to the bottom of the fan case. This took a little working to get just right. Many sites online mention using the magnet from an old computer hard drive, which I also tried, but in the end preferred the 3/8" magnets. To use hard drive magnets, you need a torx (star) wrench (screwdriver), for those wanting to try this instead. The magnets I chose were my third set. The first set were some simple magnets lying around the house, but weren't strong enough to attract the stir bar through the box lid. The second magnet I used was a Neodymium magnet (2" x $\frac{1}{2}$ " x $\frac{1}{4}$ ") bar as recommended from a how-to internet web site. This magnet turned out to be much too strong. It wouldn't allow the fan to even Third time turned out to be the spin. charm . . . it was just right.

Wiring the components wasn't too hard. Even though I tested the setup first, I realized after my first round of soldering that I had soldered the red (hot) wires to the rocker switch backwards. So, when in the 'Off' position (not illuminated) the fan would be on and when 'On' (illuminated), the fan would be off. Oh, the fun of it! I had to unsolder and then solder the connections again . . . not fun for a software engineer.

I've read in some online posts that resistors are used between the power jack and rheostat, but I'm not sure that is needed (for my setup). I based my design on both what I've seen online as well as the small circuit board that the computer fan was originally attached to (for the laptop cooler). I used an old 12V DC wall power adapter I had in a box of wires to power the stirrer. If you don't have an extra adapter tucked away in a drawer, they're pretty cheap on Amazon. Also, I've heard of people using 9V adapters as well. I've tried to label the picture below, where the wires are connected and hopefully you will find the pictures helpful.



Reverse View of Internals

The entire project probably took eight hours between trips to Radio Shack, scrummaging for parts, slicing and soldering wires and making test runs. It took about a week in real time, as I had to order parts and sit back and wait (twice for magnets) for the boxes from UPS. But, given the parts list, I could probably create a second cigar box magnetic stirrer in just a couple of hours. Depending on the box chosen, the time could be cut in half (for instance if using the cardboard cigar boxes or just simple project boxes from Radio Shack), as counter sinking wouldn't be required.

You can see the vortex from the stirrer in action below. The rheostat works really well, as I can adjust the speed such that the vortex is tight near the top of the surface to reaching the

bottom of the pot. I apologize for the tea pot, but I haven't purchased a yeast flask as of yet.



Punch Stirer in Action

This was a fun project to build and I'd list it on the beginner scale. Best of all, I've got another story (well, the first) behind a piece of my home brewery (in the making). Now the big decision . . . what will be my next DIY project?

References

By <u>Rick Wirsing</u>, Dregs Editor

Recently the California Alcoholic Beverage Control announced it is in the process of developing a new interpretation of a labeling rule that would allow growlers purchased at one craft brewery to be filled at another craft This has caused a great deal of brewerv. confusion among craft brewers and consumers. The California Craft Brewers Association has issued an explanation ("Growler Clarification") intended to help both brewers and consumers understand better existing laws and requirements for filling, labeling and selling containers including growlers. Each craft brewery may ultimately have it's own solution with respect to how it will or will not fill and label other breweries growlers.

If you have not been following the <u>Strand</u> <u>Brewers Club Facebook Page</u>, you have been missing out on announcements for beer events, club events and equipment sales.



There Will Be A Lot On Tap At 2013 SCHF

Club Shirts for the 2013 Southern California Homebrewers Festival By <u>Rick Wirsing</u>, Dregs Editor

James Amezcua is now taking orders for the SCHF club shirts. Tentative costs are: Men's T-shirt \$14; Ladies T-shirt \$13; Hooded sweatshirt \$24; and Crew sweatshirt \$21. Pre-orders will be offered soon. Catch him at the next club meeting.



Tell Us What Are You Doing

Your stories are welcome in the Dregs. Upgrade your brewery? Fine tune your practice? Take a road trip? Do well in a competition? Have recipes to share? Read a good beer book? Have club related pictures, especially for the Dregs cover? Send all those, or anything else you think would be interesting to <u>Rick Wirsing</u>. Thanks!

What We Stand For

The objectives of the Strand Brewers Club are to brew beer and share information about the brewing, presentation, consumption, judging and history of beer. We promote and encourage homebrewing competition and hope to foster general goodwill through the making and consuming of this noble and most excellent beverage. We aim to brew the best damn beer.

It is our policy to brew and consume beer strictly for fun. Under no circumstances does Strand support or condone in any manner the sale or barter of homebrewed beer, or the operation of a motor vehicle under the influence of alcohol by a member or a participant in any club event or the provision of alcohol to minors.

2013 Club Officers				
President	Rives Borland	310-469-3634	president (at) strandbrewersclub dot com	
Vice-President	Jeff Sanders	310-292-9301	vp (at) strandbrewersclub dot com	
Treasurer	Brian Kellough	310-947-1855	treasurer (at) strandbrewersclub dot com	
Activities	Tammy Minion	310-406-8057	activities (at) strandbrewersclub dot com	
Communications	Mike Haisma	310-808-3614	communications (at) strandbrewersclub dot com	
Editor	Rick Wirsing	310-872-9915	editor (at) strandbrewersclub dot com	
Webmaster	Chris Voisey	310-941-4810	webmaster (at) strandbrewersclub dot com	

Mentors The following members have volunteered to answer your brewing questions and to help beginning brewers learn the craft. You should take advantage of their expertise.				
Bill Krouss	310-831-6352	bkrouss (at) cox dot net	Rancho Palos Verdes	
Dave Peterson	310-530-3168	diablo390 (at) aol dot com	Torrance	
Jay Ankeney	310-545-3983	jayankeney (at) mac dot com	Manhattan Beach	
Jim Hilbing	310-798-0911	james (at) hilbing dot us	Redondo Beach	
Jim Wilson	310-316-2374	jim 7258 (at) gmail dot com	Redondo Beach	
Steve Fafard	310-373-1724	sfafard (at) cox dot net	Rolling Hills Estates	

