

The History Corner by Mike Retzlaff

We tend to romanticize about many things and beer styles are no exception. Today, there is a warm spot in the hearts of many for Anchor Steam beer. By 1965, California Common, as a style, was circling the drain. Heading the list of reasons for its eminent dissolution was that the commercial products had been inconsistent and generally of poor quality. Fritz Maytag changed that by making a rather large wager that he could indulge his passion to resurrect it and actually make a living from it. He won that bet and consequently, so did we!

The following is an observance of how California Steam Beer [California Common] was made over a hundred years ago and the general construction and operation of the breweries. It might give you some insight as how to make a traditional example instead of just trying to clone Anchor Steam.

California Steam Beer. American Brewers' Review 1903

At a meeting November 21 of the Saccharomyces Cerevisiae Society embracing the present class at the American Brewing Academy (Wahl-Henius Institute) Mr. CHARLES G. KUMMERLANDER read a paper on California Steam Beer which was as follows:

Steam beer breweries are generally constructed on the gravity system. Few steam beer breweries have an ice machine, and those which have not, rely upon the atmosphere to cool their wort.

In the brew-house are the hot and cold water tanks, mash tub, (in some places a cooker, but raw cereals are seldom used), brew kettle and hop jack.

Upon the roof of the highest building is placed a surface cooler which is a shallow vessel about 6 inches deep at the outer end and 8 inches in the middle. It is generally made of iron. This Surface cooler is so placed that when there is beer on the cooler, there is a constant draft over and under the cooler. It is protected by a roof, and shutters around the sides protect it when there is no beer upon its surface.

Where one brew per day is made, all the fermenting vessels necessary are 3 or 4 starting tubs, each of which holds a whole brew, and a corresponding number of clarifiers which are oblong or square wooden vats about 12-15 inches deep, and also constructed large enough to contain a whole brew. The clarifiers are used in order to allow the beer to stand at a less depth than in the ordinary fermenting vats and at the same time to allow a quicker fermentation and settling of yeast. Some brewers also have a separate krausen tub in which they pitch a certain amount of wort so that it will head into krausen at a specific time. This is used to krausen the beer in the trade packages in racking.

Materials used are either malt alone or malt and flakes. Some brewers use rice or grits in conjunction with malt. Glucose is also used in small quantities. Hops are nearly all Pacific coast hops. The malt for steam beer brewing is usually somewhat darker than lager beer malt.

Every brewmaster has his own mashing method, and naturally thinks that his is the best. Some mash in at a low initial temperature, say about 35° R (111° F), holding this for half an hour, then mashing quickly up to 56° R. by means of a raw cereal mash or with hot water and steam. Others dough in at 56° R. (158° F) and simply mash for half an hour, leaving mash at rest for one hour, and then tapping. The grains are sparged with water of 176-180° F. (64-65.7° R.).

Generally when the bottom of the kettle is covered, the wort is started boiling, and is boiled for 2 to 2.5 hours after the kettle is full. The hops are added the same as for lager beer, and at the rate of about ¾ lbs. per bbl. of wort. Irish moss is used to a great extent, and is added about 10-15 minutes before running out.

The wort is run from the kettle into the hop jack, from where it is pumped upon the Surface cooler, not in a full stream but over an inverted funnel-shaped hood which causes it to fall in a spray upon the cooler, and serves to aerate the wort, and at the same time helps to cool it.

The wort generally falls from a height of 4-5 feet on the cooler. Instead of a hood, some brewers pump their wort into a long metal trough which has one or two rows of perforations through which the wort falls upon the Surface cooler in a fine spray. This trough is also placed about 4-5 feet above the cooler.

The wort is allowed to stand on the cooler until it is cooled to the desired temperature which takes from five to eight hours. It is then run by gravity into the starting tubs, where it is pitched at a temperature ranging from 56-62° F. (10.6 to 13.3° R.). The amount of yeast per barrel used depends upon the strength of the yeast and conditions in regard to temperature of wort and fermenting room. The brewer cannot always obtain the same pitching temperature if he has no mechanical cooler and must rely upon the atmosphere to cool his wort. Where a mechanical cooler is used, the pitching temperature is generally 56° F. (10.6° R.).

Usually about ¾ lbs. yeast per bbl. of wort is used. This yeast is a bottom fermenting yeast, and when a brewer sees that his yeast does not work well or is getting weak, he then takes some yeast from another steam beer brewery. Often a yeast that will not work well with one brewer, is just the thing that another brewer requires.

When the wort is in high krausen, which takes about 24-30 hours, it is run into the clarifiers, in which it stands about 8-10 inches high. The wort while fermenting in the clarifier, continually throws up the proteids and hop resin and other matter to the top, forming a cover, which is skimmed off at a certain stage. Sometimes it is necessary to skim this cover off two or three times, especially in warm weather.

There is great variation in the time of fermentation in the clarifiers. It generally takes from 3.5 to 5 days until fermentation in the clarifiers is complete, that is, until the yeast is well settled and the wort in the clarifiers looks black. The Balling indication before fermentation varies

from 12.5 to 15% in different breweries. After fermentation it shows from 3 to 5% B.

The racking cellar is directly below the fermenting room so that the beer can run by gravity into the trade packages which are placed in rows with the bung hole up. The packages are filled from hose to which, at one end, a "dog's head" cock is coupled, and the other end is coupled to a pipe which is connected with the clarifier. Usually one man can run two or three leads of hose. First a man puts about 2 to 3.5 gallons of krausen per half barrel, into each trade package. The fermented wort is next run in and a small amount of finings added. After the finings have been added, the package is filled completely and closed with an iron screw bung. After 3 to 4 days the beer is ready to be delivered to the saloon where the half barrels are laid upon a stand, upon which they must lie about 2 to 3 days before being tapped so that the yeast has a chance to settle again. This yeast is produced from the krausen which were added.

Steam beer is a moderately clear, refreshing drink and requires care in the hands of the dispenser. It is not necessary to have any air pressure upon the beer in the trade packages as there is generally from 40-60 lbs. of pressure upon the package which can be regulated by the amount of krausen added. Where the beer is placed in basements and is drawn upstairs into the saloon, it is the custom to add 1 gallon more of krausen. Steam beer is usually of a dark amber color and has a sharp taste, similar to weiss beer. It has an effect similar to weiss beer on the stomach owing to the great amount of carbonic acid it contains.

nota bene °R is degrees Réaumur – an obsolete French scale with 0 as freezing and 80 as the boiling point of water.

So there you have it; just about everything you ever wanted to know about brewing this style of beer. You probably won't build your own coolship for the roof of your home or construct a shallow fermenter out in the garage, but there's enough info in this overview to produce a credible example of this American classic.

8¼ pounds of American Vienna plus a ½ pound of flaked barley, ¼ pound of Biscuit malt, and a bit of color malt might do the trick. Wyeast #2112 (WLP810) is the standard choice but Saflager W-34/70 (Wyeast #2124 or WLP830) is an excellent option and makes little to no sulfur when fermented at 60° or above. Northern Brewer is the standard hop of the Anchor version but there are a number of West Coast hops which should do quite well. Among the possible contenders are Glacier, Nugget, Palisade, and Willamette. This won't produce an Anchor Steam clone but it should measure up to the traditional parameters of this historic beer.

Give it a try and don't forget to bring a sample of your efforts to a club meeting.