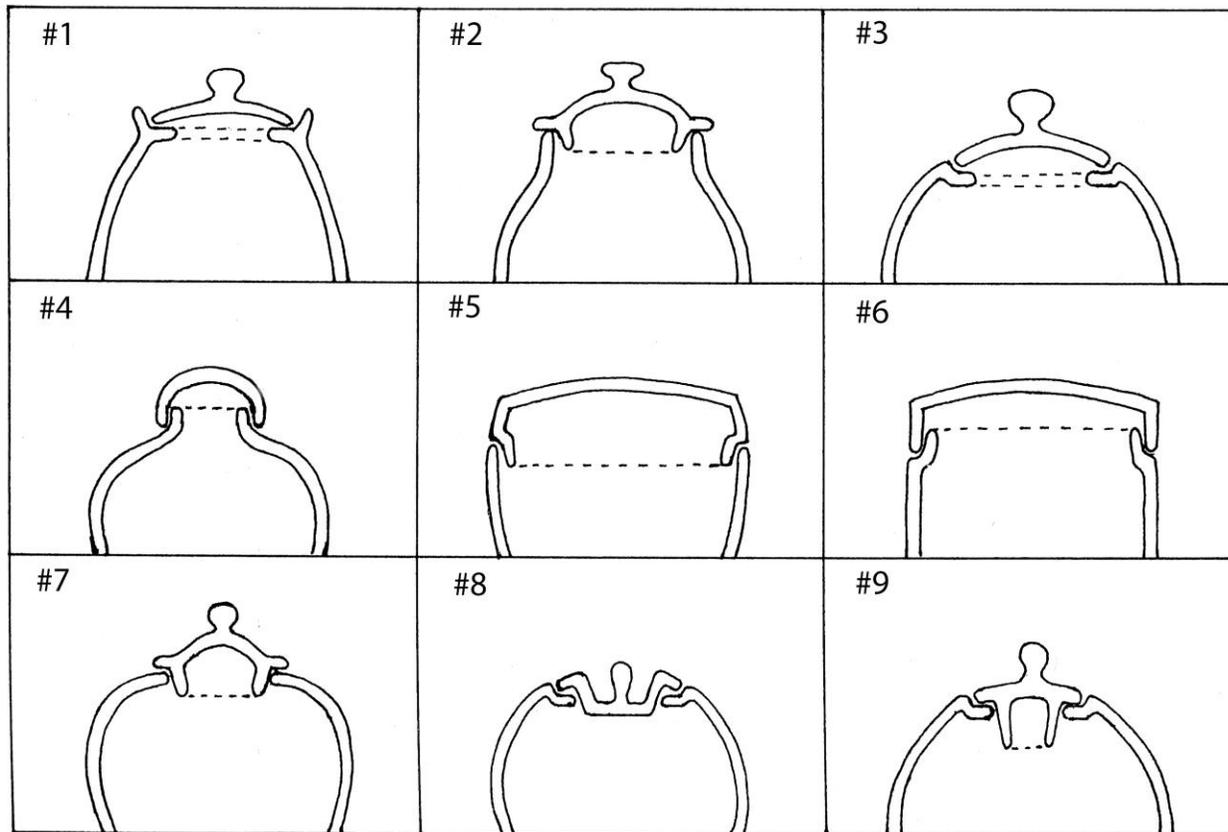


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**Designing Lids for Covered Vessels - Types of Lids and Galleries**

When making covered vessel, carefully design the lid to fit each vessel, both functionally and aesthetically. A common problem occurs when the lid seems arbitrarily placed upon the vessel, as if originally made for a different pot. Think carefully about shape and curvature of the vessel when planning shape and curvature of the lid. Curved lids (shaped like an upside-down bowl) usually look fine on both straight-wall and curved-wall vessels, but avoid lids that are domed excessively high unless you specifically want that effect. Some traditional tea and tobacco jars have pagoda-style lids that are domed high, and it is a pleasing effect. Avoid flat lids except in small vessels, because in large vessels they can sag in a midrange or high-firing.

With all types of lids, carefully consider the diameter of the lid in proportion to the diameter and height of the vessel. Specifically consider the intended function of the vessel, and the ease of access provided by the lid and gallery. Don't make a gallery more generously proportioned than it needs to be, but also don't make it narrow and precarious. Ensure that the lid fits the gallery snugly with no slop, and ensure that the approach angle on the vertical collar is slightly tapered to simplify setting the lid in place. You can see this on the images below. In #1, notice that the vertical collar of the gallery flares out slightly, so that the lid easily fits the opening, but snugs up when lowered into place. Similarly, on #2, where the gallery is on the lid, the vertical collar of the lid flares inwards for the same reasons.



**#1 – Socket-Style Gallery** – This is the classic “cookie jar” gallery, and is created by keeping extra clay in the rim as you raise the walls, and then dividing that clay into the vertical collar and the horizontal shelf with your finger and/or a rib. Note that the vertical collar flares outward slightly, making it easy to fit the lid as it approaches the gallery, and yet allowing a snug fit as it is lowered in place.

**#2 – Pagoda-Style Gallery** – As you can see in the illustration, this style of gallery is on the lid, leaving a larger opening in the top of the vessel. This type of lid is thrown upside-down as a bowl-shape, leaving extra clay in the rim and dividing it to create the vertical collar and the horizontal flange. Note that in this case the vertical collar is flared inwards for the same reasons as described in #1. This type of lid is preferable for casseroles, because condensation and spattering drip back into the vessel rather than accumulating in the gallery, as would be the case with lid style #1.

**#3 – S-Curve Socket-Style Gallery** – In this type of gallery, no extra clay is kept in the rim as the walls are lifted. Instead, the upper edge of the walls is simply manipulated to form an “S”-curve to create a socket-style gallery. Some of the most interesting galleries of this type feature an unbroken curve up the walls and across the lid. In that case, when forming the gallery, the seat of the gallery is offset from the wall just enough to accommodate the thickness of the lid, and no more.

**#4 – Cup-style lid** – This image will give you the general idea, but it is inaccurate in that the lower edge of the cup-style lid should rest on a seat created at the base of the neck of the pot, and the neck should be very low. In this case the short neck of the vessel acts as a collar, and should be tapered inwards slightly to facilitate placing the lid. That will also minimize the amount of area that must be waxed and left unglazed where the lid contacts the gallery seat.

**#5 & #6 – Covered Vessels Thrown as Closed Forms** - These images show covered boxes or jars thrown as closed forms, where a square-ended wood modeling tool with slightly-rounded corners is used to create a horizontal groove at the desired dividing point between jar and lid. The groove is later cut at the lower or upper edge to create the gallery, depending on whether you want the gallery to be on the lid or on the jar. In image #5, the groove would be cut at the lower edge so that the gallery is on the lid. On #6 the groove would be cut at its upper edge so that the gallery is on the jar.

**#7 – Pagoda-Style Lid for Teapots and Rounded Covered Jars** - This is just the standard pagoda style lid, but note how the upper edge of the vessel walls is curved inwards rather than extending vertically as in #2.

**#8 – S-Curve Socket-Style Gallery for Teapot with overhead handle** – Note that in this case, the design features a recessed lid for use when a teapot has an overhead handle, in which case a raised lid and knob might be in the way. This lid is thrown right-side-up on a bat, with the knob thrown at the same time.

**#9 – S-Curve Socket Gallery with Compound Lid System** - This is still the S-curve socket-style gallery, but the lid is a small pagoda-style lid. This might seem redundant, with gallery systems on both the pot and the lid, but there are two advantages. The lid is recessed and less likely to be in the way if there is an overhead

handle, and the vertical collar on the lid lowers the center of gravity, making the lid less likely to fall out while tea is being poured. This is generally not a problem on #8, because the center of gravity of the lid is already so low, and on #7 the vertical collar can be extended to lower the center of gravity. In all cases, the vertical collar must be tapered to allow easy placement of the lid.

### ***Fire the Lid in Place***

I have noticed that some potters glaze the lid seat on the vessel and fire the lid separately, and have never understood this inclination for a number of reasons. When I lower a lid onto a glazed gallery, it feels fragile and precarious, and I do not expect a good seal. I like to celebrate the clay, both on the foot and on the lid seat. Carefully examine the lid and the vessel mouth and determine exactly where they come in contact. Wax those areas plus a very small additional margin. Aside from the waxed contact surface, always glaze the underside of the lid. To leave it unglazed seems careless and lazy. Don't use a runny glaze in any location where it might drip down into the lid seat.

Another sound reason for firing lids in place is that the vessel may retain some "clay memory" from slightly uneven drying or other uneven treatment. Without the lid in place, the vessel may warp to a slightly oval shape, and then of course the lid will no longer fit. Having the lid in place is generally enough to keep that from happening.

I have heard some potters complain of the roughness on an unglazed lid seat, but if well-made and snug, the fit of lid to seat is a little like the ground-glass fit on fine spice jars, where both stopper and vessel are ground to a matching fit. I find that kind of fit very satisfying, and to place a ground glass stopper in an unground vessel would seem all wrong. With an especially gritty claybody, after the glaze firing the unglazed surfaces of lid and vessel can be lightly sanded with a small piece of waterproof emery paper. While sanding, hold the vessel or lid under running water to eliminate dust. This only takes a minute, and gives a satisfying surface and fit while still revealing the nature of the claybody.

In designing lids for teapots, always remember to leave an air hole, and make sure that it is always in the lid and never in the body of the teapot. Some people refer to this as a steam hole, but it is intended to let air in, not steam out. If the lid is a snug fit, and if the lid surface is wet with water or tea, it can actually create a seal. In that case, when you pour the tea, it will "glug-glug" and spatter tea all over the place as air tries to come back up the spout. An air hole prevents that. Make the hole about 3/16" in diameter, and after glazing remove any glaze with a wet pipe-cleaner.

### ***About Knobs/Lifters***

The #2, #4, #5 and #6 style lids may be serviceable without a knob or lifter, because they can be grasped by the outer rim. If such a lid is small, it can be picked up with one hand, while larger ones will require both hands. That is not a reason to avoid such lids on larger vessels, but it might not be appropriate for a casserole or covered jar.

Lids #1, 2, 3, 4, 7, and 9 are generally thrown off-the-hump upside-down as shallow bowl-forms, and then wheel-trimmed when leather-hard. If you prefer a thrown knob, it is generally added right after wheel-

trimming while the lid is still centered and affixed to the wheelhead. Since the lid is leather-hard at this point, always score and slurry where you intend to attach the knob or strap handle. A knob may be thrown off-the-hump and then attached to the lid right after trimming, or a small ball of clay may be attached to the center of the lid right after trimming, and with minimal water on the fingertips, thrown to form a knob.

As mentioned above, Lid #8 is thrown right-side-up on the wheelhead or bat, and the knob formed during throwing.

Think carefully about how the knob/lifter works with the overall shape and style of the lid and vessel. If the vessel incorporates side handles, make sure that they work aesthetically with the lid lifter. Whatever the style of lifter, make sure that the attachment points are reassuring in structure and finish. With a strap handle, make sure that the strap is thicker and wider at the attachment points, or reinforce it by adding a significant amount of additional clay.

The size of a knob or lifter should be determined by the size of the vessel, not the size of the lid. For example, a small sugar bowl might have the same diameter lid as a much larger covered jar, but should have a small knob in proportion to the smaller vessel size.

Any sort of covered baking dish like a casserole should be equipped with a generous lifter that can be grasped with a hot pad or oven mitt. That's the reality of casseroles and covered bakers, and if you do not accommodate this, your casserole will likely be used as a storage vessel or ornament.