IDENTIFYING TUMBLED ANTIQUE BOTTLES

By Burt Robbins

The best way to know if a bottle has been tumbled is to be told so by the bottle's owner. Often though, when a bottle is sold, the seller may not know or the buyer may not be able to determine if a bottle has been tumbled. Worse yet, misinformation about a bottle's history can lead to a bad decision when considering the price at which to buy or sell. When considering to buy a bottle, if the description states that the bottle has been cleaned, then there is a good chance that it has been tumbled, not just subjected to a soap and water washing as most people would do. When selling a bottle, it is best to use the data at hand to describe the bottle as tumbled, not tumbled, or condition unknown. To avoid disappointment when buying a bottle, try using the characteristics of a tumbled bottle set forth in this article to reduce, but not eliminate, doubt about tumbling history.

For a close inspection of an antique bottle, a few simple tools are helpful. A 5x and 10x magnifying glass, a needle probe, or a small, sharp-tipped knife will help answer questions about a bottle's surface features.

Bottles that have been dug or have contained caustic ingredients are often in need of improvement in appearance due to a white scale or haze forming on the glass. Rust is also a problem. Hydrochloric acid is one answer for this but it may produce an orange peel effect or leave a light haze. Many bottles are buffed or polished with felt, muslin, or rubber wheels to remove whitened, rusted, dull, or scratched surfaces. These processes involve abrasives that remove hazy, rough areas. The buffing of spots allows most of the bottle to keep an older, more authentic, unchanged appearance and has a reduced impact on the bottle.

Tumbling also involves oxide abrasives in addition to copper media, water, and rotation to produce its effects. It will affect the total inside or outside surface whereas polishing may deal mainly with smaller areas of the bottle. Tumbling has the greatest potential to restore bottle surfaces to a like new condition. It all depends on the skill of the tumbler and the condition of the bottle. Sometimes side effects of the tumbling process can be easily noticeable and possibly objectionable especially if done by someone who lacks experience. Commonly this would be a person who digs and sells bottles, and has an infrequently used bottle tumbling machine. When his work is completed, the unsightly bottle's appearance is greatly improved but in general, more characteristics of tumbling could be noticed on these bottles than on those processed by a professional tumbler. These are the effects that this article will address.

Many collectors believe that nothing should be done to a bottle which will change it permanently. Washing it may be acceptable. For other collectors, a dug bottle's appearance may be improved upon as long as it still appears to be a dug bottle. For others, changing a sick, dug bottle to one with a shiny appearance is very desirable. Some collectors or dealers will only wash out a dug bottle; others will not change anything about the bottles they buy or dig.

It's all a matter of personal preference. For sure, antique bottles are a collectable folk art and the extent of preservation and restoration are important considerations for the bottle's next owner. Altering a bottle from its raw state, as-found, or dug condition is a serious decision. It is only human nature to improve upon the beauty of prized collectables. But personal tastes change. The shiny, highly polished bottles that are desired by some today may fall out of favor in the future to a more authentic, worn look and

An enlarged photo of a non-tumbled, pontiled, BALSAM OF HONEY bottle shows a natural dimpling effect that can be confused with the orange peel effect mentioned in characteristic #6. Dimpling is a texturing effect found mainly in very early bottles or special bottles. It is possible that tumbling could tend to remove the dimpling effect from the bottle. Dimpling is a pleasing effect but the orange peel effect detracts from the appearance of the bottle. Whittling occurs naturally as the bottle is being blown and is different than either of these effects. Orange peel occurs due to different thicknesses in the glass. With experience, the three different effects can easily be distinguished.

these tumbled bottles could be subjected to aging treatments that make them appear to look their age.

Tumbling will attempt to make a dug bottle look like new but may often leave signs or characteristics on the glass revealing that the process was done. When the process is completed, the bottle will appear at first to be new and very much more eye appealing. Upon close inspection, the tumbled or polished bottle may look altered and to many collectors this is not a problem. If the bottle was originally dug in a privy and had 150 years of dirt, crud, and scale on it, then bringing it back to a shiny, like new appearance would just be natural to many people. A professional tumbler can process a suitable bottle so that it cannot be distinguished from a mint bottle but most times some evidence of his work remains. When there is a question as to whether a bottle has been tumbled, try using the following list of characteristics. This can help reduce, but not eliminate, disappointment when buying a bottle.

The more characteristics that are identified, the higher are the chances that the bottle has been tumbled. Keep in mind that a bottle may be tumbled on the inside, outside, or both and a professionally tumbled bottle can appear to be in mint condition. A lightly tumbled bottle may have no characteristics of a tumbled bottle and appear mint, but a tumbled bottle is not a mint bottle. Sometimes it can be very easy to spot a tumbled bottle but it can also be hard to tell that a bottle has not been tumbled. Even when using the characteristics list, sometimes a tumbled bottle cannot be definitely identified as such. If a bottle appears to be mint and has no signs of tumbling, you've got a great bottle. If it is impossible to tell if a bottle has been tumbled, then why should it matter?

CHARACTERISTICS OF TUMBLED BOTTLES

1. SMOOTHED WEAR MARKS

Scratches, broken bubbles, chips, wear marks, and bruises will appear to be smoother or more polished on a tumbled bottle when examined with a magnifying glass. These smoother marks are often more noticeable on embossing and the base of the bottle. The embossing rises above the rest of the bottle and is more delicate. This makes embossing more of a target for impacts over the life of the bottle. The base gets wear marks as a result of years of shelf use. The light chips and scratches are often removed when a bottle is tumbled or buffed. The deeper marks may be smoothed and can be observed. The goal of a professional tumbler is to remove as many wear and impact marks as possible but not wear down the embossing or break the bottle. The process may not remove gouges and larger, deeper impacts but they will appear to be smoother, clearer, and more rounded after tumbling. The base and the wear marks on the base will look unnaturally smoothed after tumbling. The tumbler will often rub the base with abrasive to restore or make new wear marks. This makes the base of a well-worn bottle look somewhat more natural. Under magnifica-

tion, the new lines appear to be more in parallel to one another and not in the random directions that occur with natural wear marks. This altering of the base of the bottle can be easy to detect.

2. LIGHT EMBOSSING.

Rounded, smooth, or weak embossing may be seen on an over-tumbled bottle. Don Kelley, with over 10 years of tumbling experience working in Mount Morris, Pa. says that rounded or weak embossing is the main feature to look for to identify a tumbled bottle, especially an over-tumbled bottle. So does Steve Lang, an avid bottle collector for 30 years from Indianapolis, Ind., who ties local bottles with local history. Steve looks for removed or reduced embossing first when examining an old bottle that he might buy. In fact, most collectors would say that weak embossing is the easiest feature to use to identify a tumbled bottle. Sometimes though, a bottle blown with weak embossing may appear to be tumbled. Look for other characteristics in this list to confirm suspicions.

3. SMOOTHED PONTIL.

A dull, smooth, or rounded pontil may be noticed on a tumbled bottle if the bottle was not protected in any way. The pontil would not be sharp. If the base of a bottle was buffed, then smoothing to the pontil can be avoided. Check the pontil with a magnifying glass to see if polishing compound is lodged in a recess of the pontil. A pin, a thin wire, or a sharp knife can dislodge the material for identification and help distinguish it from dirt or bottle contents. Sometimes though, the pontil and base are smoothed when made at the factory or smoothed by wear through the years.

4. UNREMOVED RESIDUE.

With a magnifying glass check the pontil, broken bubbles, applied top or lip, chips, dings, and scratches for unremoved polishing compound residue that may be lodged in such small tight spots. The residue may not have been completely washed away after tumbling and may be black from the copper, white, or red in color from buffing compound. A pin or sharp knife can dislodge it. Under a lens, dirt does not appear uniform whereas polishing compound can be touched with the pin to reveal a uniformly colored smooth powder. A residue can also be found on buffed bottles.

5. IRON PONTIL RESIDUE GONE

An ironless iron pontil can raise questions. Sometimes an iron pontiled bottle will not have iron residue. This can occur naturally in the glasshouse when the bottle is made. Also, acids in the soil could have dissolved the iron on an iron pontil of a dug bottle. Buffing or tumbling can also remove at least some of this iron if the iron pontil is not protected by the tumbler. If the iron is gone, the pontil has no dark, iron rust residue and only the pontil roughness remains. If the iron pontil is not protected or is over-tumbled, the iron pontil can be worn nearly away. A professional tumbler will avoid this problem.

6. ORANGE PEEL.

A light tumbling can produce an uneven, spotty orange peel-like effect. When at first the white scale on a bottle is removed by tumbling, buffing, or by acids, some uneven, clearer, textured areas are formed as a result. A heavier tumbling would tend to produce smoother glass and remove the orange peel effect. This effect is not to be confused with the larger whittling effects of the bottle molding and blowing process when the bottle was made or the texturing effects intentionally made in the bottle mold to produce an artistic appearance in the bottle. Also don't mistake orange peel for an exterior dimpling that can occur naturally when glass is blown into an older mold in the glasshouse. Under the magnifying glass, the natural dimpling appears as though small shallow impressions have been pushed into the glass to create a texturing effect in some areas. Orange peel effect is caused by either a chemical or physical removal of the white haze leaving a characteristic pattern behind. In the tumbled bottle it can be seen in small or large areas. The experienced tumbler knows that he must remove the white haze and smooth out the orange peel effect. Unskilled tumbling will produce an effect called micro-chipping which is a detrimental sandblasting like effect on the inside surface of the bottle.

7. NO MOLD SEAMS

Worn, weak, or no mold seams can occur on a tumbled bottle. A professional tumbler will avoid tumbling a bottle too much so that the mold lines or seams will remain and be easily identified

8. UNPOLISHED AREAS WITHIN EMBOSSING.

Rough, unpolished areas can occur within a tumbled bottle's embossing, especially smaller embossing. This effect occurs with buffed bottles also and happens when the abrasive cannot get in between the raised lettering or other tight spaces to produce a polish. Large copper tumbling medium can also cause this effect. For example, if the bottle has an embossed D letter, the letter itself would be shiny from the polishing but the empty area within the D near the embossing would be dull. Sometimes the spaces between letters are close and unpolished with polishing compound residue evident. A professional tumbler can avoid this problem.

9. UNNATURAL SHINE.

A polished or tumbled bottle may have great, unnatural shine. A 10X magnifying glass will reveal very fine polishing lines that will refract light unless a very fine finishing grit was used at the end thus producing a high shine. An experienced bottle tumbler will be careful to not over-polish a bottle unless instructed otherwise.

10. UNNATURAL TOUCH.

When held in the hand, a tumbled or polished bottle may feel unnatural, maybe even slippery. It may have no texture at all. If dirt, food, moisture, or oils from the hand are on the bottle this effect may be obscured somewhat. Over-tumbling can produce a dazzling shine that may not befit a 120-year-old bottle.

11. STOPPLE FINGERMARKS.

These are small areas of rougher, unpolished, or unfinished exterior glass that can be found on the base area. They form because the stopple fingers that hold the bottle prevent the abrasive and copper from reaching the glass while the bottle is being tumbled. An experienced bottle tumbler will repeatedly move the bottle in the tumbling tube a little to prevent this effect.

TRUE CONFESSION

Cleaning bottles was not as easy as I once thought

In 1972 when living in New Jersey, I had a business card printed and began to clean my collection of bottles and earn some money by removing the white, sick, haze from other antique collectable bottles for other collectors. I tried buffing the bottles with various abrasives such as cerium oxide, aluminum oxide, jewelers rouge, silicon dioxide, silicon carbide, pumice, and rottenstone. Some were better than others. I also tried to remove the haze with sulfuric acid, hydrochloric acid, hydrofluoric acid, aqua regia, and nitric acid. These chemicals might have had some success with a light haze but if a heavy haze were removed, an orange peel effect would result. I used all types of household cleaners, ammonia, solvents, and stain removers with little success and finally retired from the bottle cleaning business at the age of 28.

At that time, my cousins were experimenting with the bottle tumbling process and they had some success, but I never tumbled any of my bottles. If I had a bottle that needed attention, I would later use a Dremel and small buffing wheels or a larger muslin buffing wheel on problem areas. To me, the work I did on the bottle improved the bottle's appearance and still allowed a dug bottle to have the character of a dug bottle. I should have tried to go into the bottle tumbling business back then; tumbling can yield amazing results. Today I would only use an experienced tumbling professional because careless tumbling can break a bottle make it unsightly. For all its benefits, tumbling can also produce effects that are noticeable and undesirable. Tumbling bottles can be risky and so can polishing. If you go with a tumbling pro, your bottle will turn out more desirable and have fewer or no negative tumbling effects.

A Dremel motor and some small buffing wheels are good ways to polish small areas of an old bottle. Be careful not to crack the bottle from the heat of friction.

SIDEBAR #2 TO IDENTIFYING TUMBLED ANTIQUE BOTTLES

RECENT PERSONAL EXPERIENCES WITH TUMBLED BOTTLES

As I was working on this article, I realized that I had some problems. First, to my knowledge, I have no tumbled bottles in my collection to write about and describe. Second, I have never tumbled a bottle in all my years as a collector.

Lastly, I have never had the experience of sending a bottle to be tumbled by a professional. To be as factual as possible in writing this article, I needed to work with a professional tumbler and make some contacts and observations.

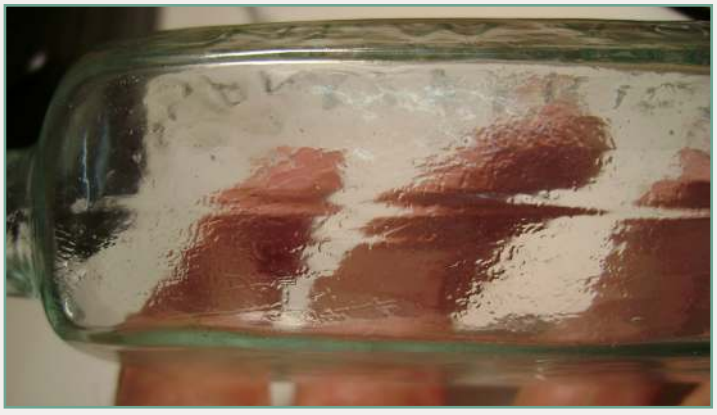
I searched on eBay and saw some seemingly nice photos of tumbled bottles, but the tumbler did not want to be involved with the article because he had previously been hurt by a lot of negative feedback from collectors who are against tumbling.

Soon after, in November, I purchased a SANDS'S SARSAPARILLA bottle on eBay and got a big surprise. When I received and examined the bottle, it exhibited many characteristics of being tumbled, as noted in this article, but was not described as tumbled by the seller. The bottle was clear in his photos but because it was poorly tumbled it looked bad upon close examination so I returned the bottle and got my money back. Finally, I got lucky. Since I had heard of the Jar Doctor on the internet and that he sells tumbling supplies, I decided to contact him. Wayne was very helpful and gave me the contact information for Don Kelley, a professional bottle tumbler, collector, and owner of the Dunkard Valley Bottle Barn in Mount Morris, Pa. I contacted him right away about tumbling a bottle for my article. Don was very helpful and answered many questions.

I was very apprehensive about sending a bottle from my collection. The bottle was a dug, aqua pontiled TRAFTON'S BUCKTHORN SYRUP and it looked bad. Talking to Don was reassuring and he thought he could tumble the bottle and greatly improve its condition yet still retain a low exterior polish and natural look that I wanted to see in this bottle. We both agreed on an outcome and I decided to send the bottle off on January 8, 2021. The bottle had many of the problems of a typical dug bottle and I took many notes and photos for comparison when the bottle returned.

The bottle came back on February 22. While it was gone, I spoke to Don three times about its progress and the best way to handle the finishing touches. As I opened the box, I could see the bottle through the bubble wrap and I knew that I would be very happy with the results. The scaly white sickness was gone. There was no highly unnatural shine and the nearly all of the inside and outside surface scratches were gone. As I compared the finished bottle to some photos, it

This photo shows the pontil of the SANDS'S bottle and how some white polishing compound had become stuck in between the glassy pontil recesses and tight spots. The white compound surrounds the pontil. A small amount of the compound was easily picked out and removed. Under a magnifying glass, it appeared to be polishing compound, not dirt or dried bottle content residue.



Shown here is the orange peel effect on the tumbled SANDS'S bottle. The bottle is clear but large areas of orange peel effect on the inside surface can easily be seen. The bottle was tumbled enough to remove haze but needed more tumbling time to smooth the glass.

The TRAFTON'S bottle photographed before tumbling. The arrows point to inside haze.