



Before



After

**Contact us to set up a free bell phone consultation and to discuss your bells.**

Verdin manufactures new bell ringing equipment and hardware to restore bells to their original beauty and resonance and to keep them safe. Since 1842, Verdin has been servicing bells at churches, town halls, and universities around the world. Bell repair and restoration are important hallmarks of our business. Verdin provides customers with the industry's most experienced bell repair and restoration team — all backed by the most respected, financially sound bell company in the country.



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# Are the bells in your tower safe?



**144-year-old St. Louis bell survives fall**

**900-pound bell falls after bolt breaks loose from rotten wooden base**

**Church bellringers run for cover as bell falls**

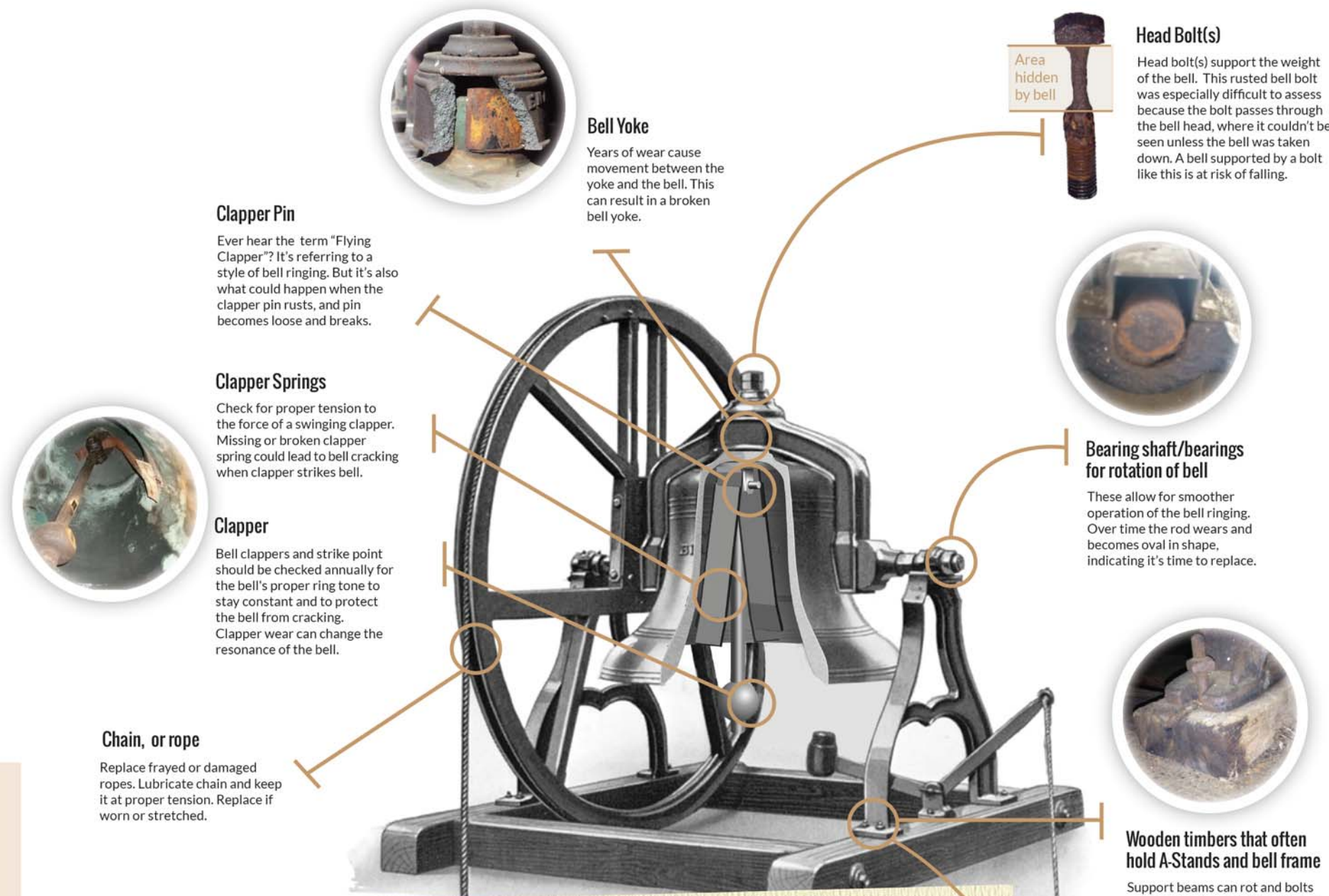
# 8 things that should be checked every year to keep your bells safe.

While bells will last for decades, the bolts, hardware, clappers, and the supporting structure and tower itself are subject to weather, temperature extremes and normal wear and tear.

1. Visually inspect and photograph the entire structure (bell tower, steeple, etc.), wooden or steel supports, floor, access to the bells, etc. Any signs of cracks, aging, or wear and tear should be thoroughly examined, noted, and photographed from different distances and angles, both inside and outside. Detailed bell records help in bell maintenance and are valuable for insurance purposes.
2. Examine and photograph all bolts, hardware, and bell ringing equipment, noting the condition of the bolts, bearings, bearing shaft, chains, and pins (rusted, corroded, loose, worn, etc.).
3. Tighten loose bolts and replace rusting bolts immediately. Because bell bolts secure the bell to the frame, much of the wear is hidden from plain sight. It is important to properly assess their condition to ensure the bell is safe, as the main bolt is what holds the weight of the bell.
4. Annually inspect the bell clappers and strike point to ensure that the bell's proper ring tone stays constant. Clapper wear can also indicate the clapper springs need adjusted or replaced, and can also change the resonance of the bell.
5. Check bell(s) and equipment for cracks and wear. Replace frayed or damaged cables/ropes.
6. Inspect clapper joints to make sure they are adequately lubricated, and adjust as needed.
7. Note any roughness or noise as the bell swings, which usually indicates a worn or damaged bearing shaft or bearings that are gunked up, dry, or need replaced.
8. Make sure the towers and supporting structures can safely handle the bell swinging. If the support structure is unstable, a new structure should be built or a stationary bell ringer installed.

## ☑ Notice these things?

- ☑ Bells difficult to ring? This might be a sign that the pulley blocks and/or wheel is loose, poorly aligned, damaged, or could indicate rope wear.
- ☑ Muffled or stuttering bell? This could be a sign that the clapper return springs are loose or broken.
- ☑ Feel a shock when ringing bell? This may be a sign that the bell is loose from its yoke connection and needs urgent service. Immediately stop using the bell, clear the area, and call for repair. The bell is at severe risk of falling.
- ☑ Support beams rotting, rusting out.
- ☑ Bell sound has changed.
- ☑ Bat and bird droppings? Animal droppings corrode bells and hardware. It's very important to keep bat and birds out of the bell tower. If droppings are present, figure out where the animals are entering and take steps to screen them out.
- ☑ Can't remember the last time your bells were serviced or evaluated? It's probably time to schedule service!



### Clapper Pin

Ever hear the term "Flying Clapper"? It's referring to a style of bell ringing. But it's also what could happen when the clapper pin rusts, and pin becomes loose and breaks.

### Clapper Springs

Check for proper tension to the force of a swinging clapper. Missing or broken clapper spring could lead to bell cracking when clapper strikes bell.

### Clapper

Bell clappers and strike point should be checked annually for the bell's proper ring tone to stay constant and to protect the bell from cracking. Clapper wear can change the resonance of the bell.

### Chain, or rope

Replace frayed or damaged ropes. Lubricate chain and keep it at proper tension. Replace if worn or stretched.

### Bell Yoke

Years of wear cause movement between the yoke and the bell. This can result in a broken bell yoke.

Area hidden by bell

### Head Bolt(s)

Head bolt(s) support the weight of the bell. This rusted bell bolt was especially difficult to assess because the bolt passes through the bell head, where it couldn't be seen unless the bell was taken down. A bell supported by a bolt like this is at risk of falling.

### Bearing shaft/bearings for rotation of bell

These allow for smoother operation of the bell ringing. Over time the rod wears and becomes oval in shape, indicating it's time to replace.

### Wooden timbers that often hold A-Stands and bell frame

Support beams can rot and bolts can become loose, leaving the bell at risk of falling. Some towers and supporting structures may no longer be stable enough to handle the swing of a bell. These bells can be immobilized and a stationary bell ringer installed.

## 144-year-old St. Louis bell survives fall

The bell from St. Louis Catholic Church is seen having fallen from its supports after a bolt broke loose from the wooden base.

By John Stegeman, The Catholic Telegraph

For decades, the several blocks around 8th and Walnut streets in downtown Cincinnati have echoed the sounds of the St. Louis Church bell. Sometime in late June, it was noticed that the noon bells, which signal to many daily Mass goers that its time to head to the 12:10 p.m. liturgy, fell silent.

The cause for the silence wasn't a failure of the bell ringing mechanism, or some kind of power disruption, but rather that the 36-inch diameter, 900-pound, bronze-cast bell in St. Louis' bell tower had fallen. Pictures show that a bolt from a metal A-frame supported the bell had torn through its wooden base, causing the bell to fall sideways about six to 10 inches.

Fortunately, the bell is undamaged. The bell was cast on Second Street by the VanDuzen Bell Company in 1860.



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