



Episode 703, Story 3: Cemetery Alarm

Wes Cowan: Our last story explores a black market trade that scandalized post Civil War Ohio. Since before the time of the Pharaohs, civilizations have been burying their dead along with personal effects – jewelry and artifacts¹ that could make a thief rich overnight. But left unguarded, these coffins and tombs frequently became the treasure chests of grave robbers. Over the centuries, countless sites have been desecrated, looted... And valuable historical artifacts lost to the black market. Henry Dorrum of Chesaning, Michigan, believes he's found the 19th century answer to this historic problem.

Henry: I've been collecting for about 25 years and this is the most unusual object I've ever found.

Wes: I want to get a look at what kind of strange gadget Henry bought for himself. Well, what's in the box?

Henry: I don't know. I thought it might have been an explosive device. It's a heavy little devil.

Wes: Oh, that is heavy. Where did you get this thing?

Henry: At a farm auction in Saginaw County Michigan. I like unusual items of all kinds; I'm a collector of anything.

Wes: I've got to ask you. Are you sure it's not going to explode?

Henry: Oh no, it's been thoroughly checked, I've had it for a long time, and you can look down in there, and it's completely void of any powder.

¹ <http://fifthringcom.proboards56.com/index.cgi?board=rr&action=display&thread=258>

From the earliest periods of Egyptian history, all Egyptians were buried with at least some burial goods which they thought necessary after death. At a minimum, these usually consisted of everyday objects such as bowls, combs, and other trinkets, along with food. Wealthier Egyptians could afford to be buried with jewelry, furniture, and other valuables, which made them targets of tomb robbers.



Wes: Henry explains that, once, when he had it on display at a Baltimore gun show, a passerby claimed he recognized the device – he told Henry it was a kind of “grave alarm”.

Henry: He’d seen a picture of it in a magazine years ago, and that’s what it was a grave alarm.

Wes: I’ve got to tell you, I’ve never heard of such a thing. The stranger told him “grave alarms” were used to protect jewelry and other valuables that may have been buried with the deceased.

Henry: They would put one of these in the casket, and when the grave robber opens the coffin it’s going to blow up in his face.

Wes: What is it that you want me to find out about this?

Henry: I want you guys to find out if this truly is a grave alarm.

Wes: Well, Henry I’ll see what I can dig up. I can’t find any maker’s mark or serial number — which is a little odd if this had been manufactured for sale. I’m skeptical this is an alarm, as Henry believes. It looks more like some kind of civil war era weapon. This is a bomb! I mean, this thing would have held like maybe half-a-pound, three-quarters-of-a-pound of black powder in here. It weighs about 8 lbs – and it’s made of cast iron, which would have turned into shards of deadly shrapnel if this thing had ever exploded. This is a spring-loaded hammer that would have been set by moving this metal bar on the collar around. If somebody stepped on it, this firing mechanism would almost certainly have been activated. So when this little collar is moved even a fraction of an inch, the hammer drops and then it hits an explosive cap, almost like a capped gun and if you look you’ll see that there’s a hole on that nipple, so a spark would travel in to that interior, ignite the gunpowder, and bam! I’ve come out to the Cordova Dragway Park, about two hours west of Chicago, to see just how dangerous our explosive device would have been. Larry Lefferts of Central States Fireworks confirmed the amount of black powder our device would have carried.

Larry: What we did is we took $\frac{3}{4}$ of a pound of black powder and we buried them and put a little dirt on top to simulate what it may look like. Fire in the hole!



Wes: Woh! That thing can do some serious damage. About an hour from the drag way is the Rock Island Arsenal. Established in 1862, it's the nation's largest government owned and operated arsenal. Kris Leinicke (ly-nuh-kee) is the curator of the museum, which houses an extensive collection of historic military weapons. This is the device I wanted to show you.

Kris: OK wow.

Wes: So what do you think it could be?

Kris: It looks to me like it might be a Civil War torpedo

Wes: Torpedo? Kris explains that today's torpedo is known as an underwater weapon launched from a submarine or warship. But it once had a much broader definition.

Kris: Before the First World War, a torpedo meant any hidden explosive or landmine.

Wes: Kris says that percussion caps – which fit over the nipples and produced the sparks that ignited the gunpowder – were a Civil War technology. So is this a military device then?

Kris: I don't think it is, because it's not marked, and a lot of military equipment at that time did have markings, the other thing is that the collar on the nipple is different than on military weapons at that time period. Let me show you. We have here a Civil War weapon that was made at Watertown Arsenal, and you can see that this item that we have has a square collar.

Wes: It's a tiny detail, but Kris explains the US Military routinely used square collars on percussion weapons. Our collar is rectangular. I ask Kris if she thinks there's anything to Warren's idea that the device was designed to deter grave robbers.

Kris: That's really interesting, but I've never heard of that before.

Wes: And - if this had been buried - Kris spots what appears to be a fatal flaw in the design of our torpedo.



Kris: The other problem is once you buried it you'd have dirt in here and then how would the hammer hit the little percussion cap that's on the nipple to create the explosion but it's definitely professionally made so it has to have some kind of practical use.

Wes: You know, if our device really was meant to deter grave robbers, there's got to be some account of one of these going off. I try searching online to see what I can find about grave alarms. I don't turn anything up searching under grave alarms – but grave torpedo – which is the term Kris used, returns a curious hit. Okay, here's an article from the Richwood Gazette, 1881 in Ohio. Grave robber killed, "three men who attempted to rob a grave near Gann in Knox County Ohio met with a horrible obstacle, when nearing the coffin, they struck a torpedo. So these things really did exist. One of these devices, patented, in 1881 sounds similar to ours. Thomas Howell of Circleville Ohio patented and exploding shell that was buried right above a coffin. If robbers try to dig up the coffin, the shell would explode, injuring or killing the thieves. It appears that in these cases at least, the grave robbers weren't trying to swipe jewelry and other valuables; they were trying to steal bodies. It says, during the 1800's, medical schools stole cadavers, to demonstrate you know, grouse anatomy to the students, and that this was particularly a problem in Ohio. Scott Gampfer is the Director of History Collections at the Cincinnati Museum Center at Union Terminal. He's never seen anything like our device – but he understands the historic need to prevent body snatching.

Scott: There were lot of dissections that were taking place in these medical colleges and thus a need for a lot of cadavers.

Wes: Between 1865 and 1890 the number of medical schools in the US almost doubled. Cincinnati area medical schools competed with each other to offer practical experience to students. But bodies were not easy to come by. The Church objected, and many states only permitted the bodies of executed criminals to be used for dissection.

Scott: And so really the only avenue for these schools to obtain cadavers was through the black market, in other words by doing business with grave robbers.

Wes: In the 1870's public concern about body snatching was at a fever pitch in Ohio in particular, because of a notorious incident. The body of John Scott Harrison, father of future President



Benjamin Harrison, had gone missing from his grave. His body was discovered, dangling from a rope, down a dark shaft, at the medical college of Ohio provoking enormous outrage.

Scott: It was particularly bad, because measures had been taken by the Harrison family to prevent this very thing from happening.

Wes: Scott shows me an article from the Cincinnati daily commercial – written in 1878, just after Harrison's body was stolen. "If cemented walls carefully and skillfully constructed, and vast weights requiring the strength of many men to lift, and hired prepaid watchman could not save their loved and honored parent's grave from desecration and dishonor. What could?" Wow.

Scott: I think that's one of the things that shocked the public so much; if it could happen to the Harrison's it could happen to anybody.

Wes: The public had run out of ways to secure their loved one's grave. So they had turned to deadly explosives as a last resort. But is our device really one of these torpedoes? Without a maker's mark – or a clear explanation for how it might have worked – I'm still not sure what we have. Scott put me in contact with Paul Mayberry, the local historian of Pickaway County, Ohio. Pickaway includes the town of Circleville, where Thomas Howell invented his torpedo. My research led me to Circleville because of this object; do you know what this is?

Paul: Well, that's really something.

Wes: Paul has never seen one of these before. But he says grave torpedoes have a long history in the region.

Paul: Our local cemetery abolished the use of them, I think in 1890 because it was too much of a danger to the people who are working in the cemetery.

Wes: Supposedly there's a guy named Thomas Howell who lived here in Circleville who made devices like this. Have you ever heard of Howell?



Paul: Yes I have, I've done some research on Thomas Howell. He was a watchmaker and times got a little tough for him, and he decided to resolve some of the problems that we have with grave robbing.

Wes: Paul assembled a number of local articles on Howell that he copied from old newspapers.

Paul: This is some of the advertising that he did.

Wes: So, it looks like its from the newspaper from July 11th 1879 the ad says, "sleep well sweet angel, let no fears of ghouls disturb thy rest, for above thy shrouded form lies a torpedo, ready to make minced meat of anyone who attempts to convey you to the pickling vat." Wow, that is incredible, I mean, that's pretty good direct marketing, isn't it?

Paul: It is.

Wes: But the picture of Howell's grave torpedo looks nothing like ours. Do we have a grave torpedo, and how would it have worked? Here's the problem that I have, if you set this thing and you put it into a grave, what's to prevent it from exploding in your face?

Paul: Well, this is an ingenious device...

Wes: What Paul shows me next gives me the answer I need for Warren. When you first showed me this thing and you said you thought it was some sort of a grave alarm, I said, yeah, come on this guy is crazy it couldn't be a grave alarm. But as I got in to the investigation, I discovered that this is not so much an alarm as it is a deadly weapon.

Henry: Oh yeah?

Wes: I tell Henry that his device was designed to deter thieves stealing bodies, not valuables.

Henry: Well the guys I talked to were half right anyway.



Wes: Here's the thing I couldn't figure out -- how could you put this in to a grave, set the triggers, and fill the grave up without blowing your head off.

Henry: You got me in suspense here.

Paul: Thomas Howell was so successful with his first grave torpedo that he designed another one... And I have a patent for that one here.

Wes: T.N. Howell grave torpedo December 20th 1881. The old patent papers show a curious parabola or arc over the top of our torpedo – and suddenly I understand how our device is supposed to work. What's missing from here is a thin metal shield that fit over this, that had a hole in the middle.

Paul: Right

Wes: That according to the patent papers you take a long tube like a stand pipe; you put a funnel up at the top after this is buried in the grave...

Paul: Correct

Wes: And you fill this chamber up with gunpowder then once the chambers filled up, you drop a cork down the stand pipe or some stopper. When the tripwires – secured to on the collar – are disturbed by a grave robber... The thing goes kaboom! Wow! I would say that's the same device. Because his device has no markings on it, and because it's not an exact match, Henry may have a prototype of Howell's patented Grave Torpedo.

Henry: It's so close that – it's got to be it. It's got to be! You guys really did a job on this. This is worth knowing – this is, I mean this is history.

Wes: Well, it's been a great investigation; I really appreciate you bringing this to me.

Henry: You're right on the ball Wes. Put her there, pal.



Wes: In 1881, the year Howell's Grave Torpedo was patented, Ohio enacted the Anatomy Law. It permitted medical schools to use unclaimed bodies from public institutions. By the turn of the century, body snatching cases had significantly declined. Cadaver storage and preservation improved, allowing schools to accumulate bodies. And the need for stealing fresh human corpses was a thing of the past.