PMM BLOG ARCHIVE

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The Schü-mine 42

(Pennsylvania Military Museum, T. Gum, Site Admin.)

The use of anti-personnel mines against a foe can be placed in three categories – blast mines, fragmentation mines, and a bouncing mine using either a blast or fragmentation explosive that utilizes a pressure-activated spring that throws the mine into the air from ground level. Their use has devastating effects on troop movement, and even more so on morale. Their use during World War II was prevalent, at times halting entire formations.

A common form of anti-personnel mines of this period used by the German military was of the type being pressure detonated or using tripwire detonation, as opposed to command detonation, timed detonation, or ignition by spark/flame.

Pictured here is a Schü-mine 42 (50.16.13) that was found by Captain Edgar R. Kadel, US Army, of Carlisle, PA. Kadel found this mine outside of Bullingen Germany after the Battle of the Bulge atop a hill that had been hit with phosphorous incendiary rounds, causing the ground-snow to melt away, revealing the mine.

Kadel was commissioned in August of 1942 and attended artillery training at Ft. Bragg and was assigned to the 814th Tank Destroyer at Camp Polk. He would arrive in France, through Omaha Beach, on D+14 serving with the 814th and later the 7th Armored Division. Kadel would retire in 1970 as a Colonel.

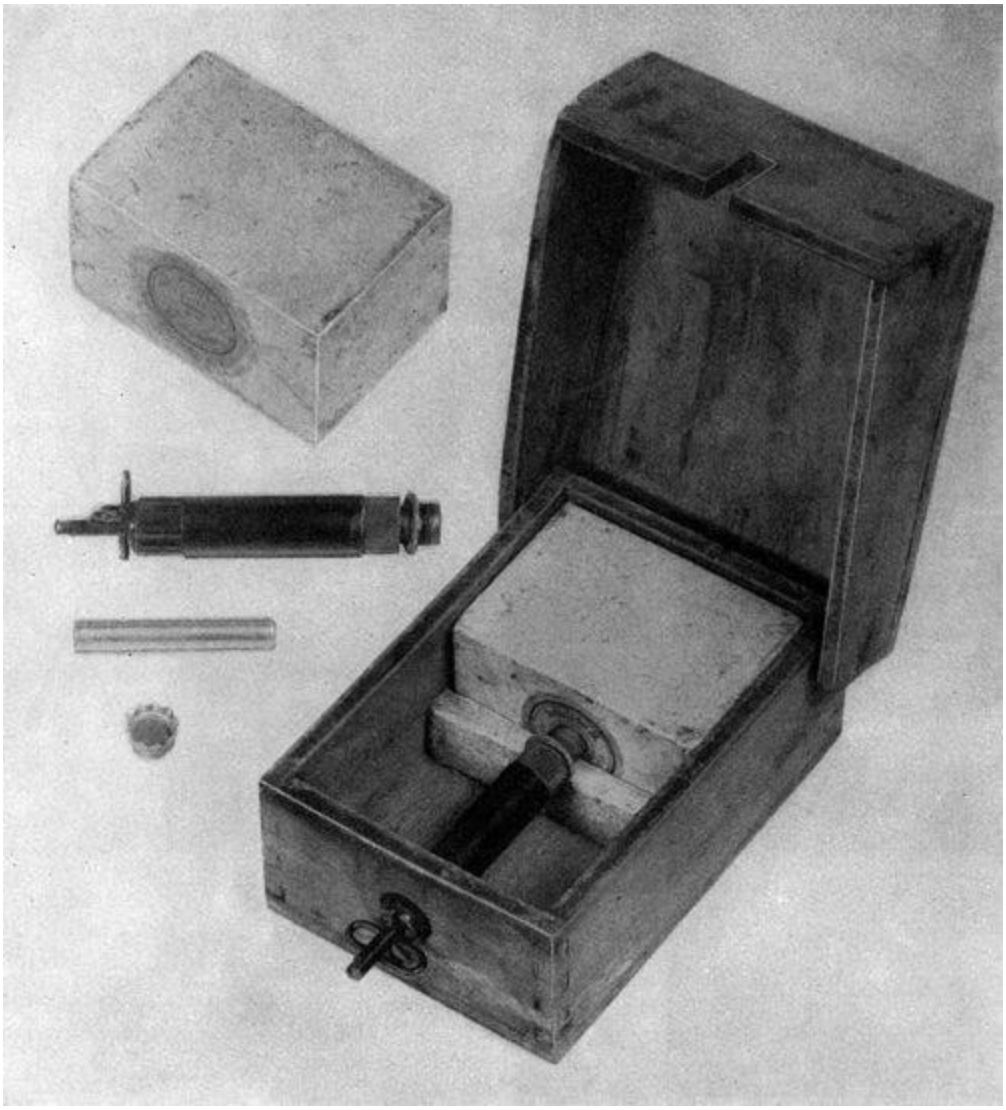
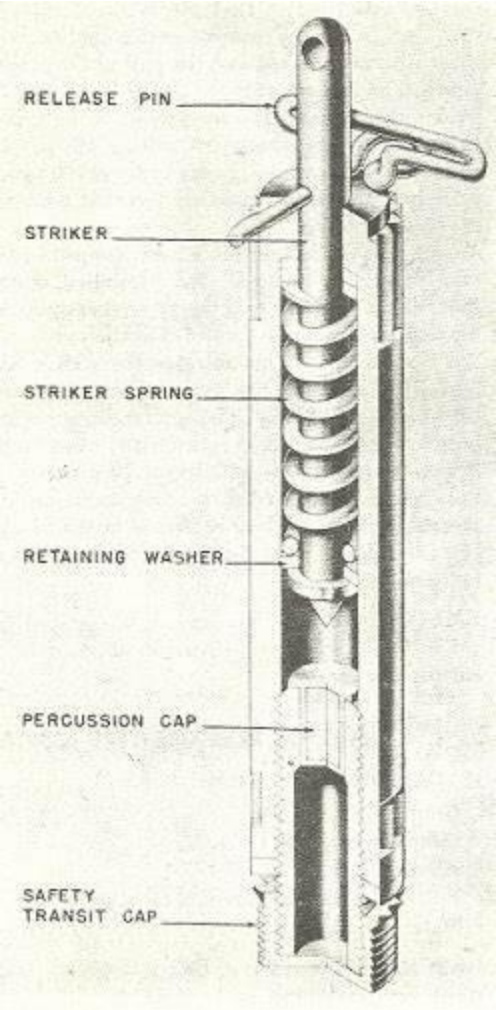


Photo of mine, from Army Technical Manual.

This World War II German anti-personnel detonates when pressure is placed on its top, such as a foe stepping on it. The design is quite simple - a wooden box with a hinged lid that contains approximately seven ounces of TNT (explosive). The wooden box would have a ZZ-42 type detonator placed through a small hole in the side.

Cross section of detonator.

If detonated by design, through pressure, the trip pin would be depressed enough for the striker to be released. The second option of use would be b y way of a tripwire being used, connected



the detonator and when tripped, the striker would be released.

Unfortunately for many US service personnel, encountering a mine was all too common and met with dire consequences. For example, in a previous blog post, we featured a soldier that encountered a roadside mine (bomb) that detonated resulting in his Jeep flipping, resulting in severe injuries to the vehicle occupants.

Today various forms of mines are used in defensive perimeters, and by enemy forces through the development and use of improvised explosive devices (IEDS)