



By Leslie Przybylek, Curator of History



This hat belonged to off-duty Pittsburgh patrolman Charles H. Schultz, who barely missed being shot in the head on June 10, 1921, when he confronted bandits on the North Side who had just held up a Boggs & Buhl bank deposit at gunpoint on Federal Street. Dramatic public crimes such as this helped spur experimentation with tear gas as a crime prevention tool. HHC Collections, 94.51,218, Photo by Liz Simpson

Fighting Crime with a **Federal Gas Billy**

One evening in October 1928, two salesmen for Pittsburgh-based Federal Laboratories stood outside a garage in Wilkes-Barre, Pennsylvania, along with local policemen. One salesman tossed a tear gas "bomb" into the garage, followed by a \$20 bill, and shouted, "The money is for the man who can get it." Officers charged into the building but the gas quickly drove most back out. Those who attempted to retrieve the cash "wept tears for about twenty minutes."1

It sounds like a prank, but salesmen for Federal Laboratories conducted similar demonstrations across the country in the 1920s.² Artifacts in the Heinz History Center's collection illustrate what they were selling: tear gas products, including guns disguised as policeman's nightsticks. Called the "Federal Gas Billy," such weapons were a response to the wave of crime and unrest fueled by Prohibition and radical politics in the 1920s. Aided by

Examples of the Federal Gas Billy, all dated 1925. Invented in the 1920s, these policemen's nightsticks housed cartridges that enabled them to shoot tear gas in a continuous spray or (as the longer stick did) emit a blast cloud. They were manufactured and sold by Pittsburgh-based Federal Laboratories, Inc. HHC Collections, gift of the Pittsburgh Police Historical Association

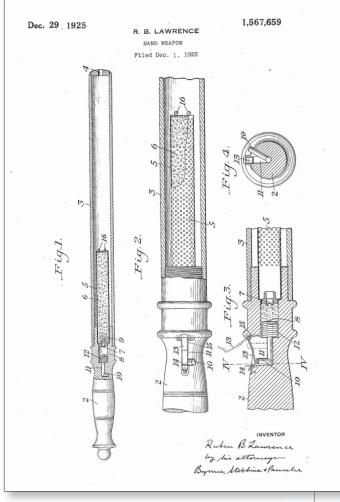
2011.127.247, 2011.127.248, 2011.127.249, and 2011.127.472. Photo by Liz Simpson

better cars and roads, criminals seemed to be everywhere. By January 1921, a former superintendent of the Pittsburgh Police urged the creation of a national detective agency to fight crime.3 In June 1921, a dramatic daylight hold-up on the North Side typified scenes repeated nationwide: three men jumped out of a car, grabbed a Boggs & Buhl bank deposit, and engaged in a running gun battle along Federal Street, killing one store employee and terrifying shoppers and pedestrians.4

When a frightened public demanded action, companies such as Federal Laboratories began experimenting with a new crime prevention tool: tear gas. Introduced during World War I, tear gas was regarded as a

"humane" weapon that incapacitated but did not kill.5 The Federal Gas Billy was one of multiple gas-delivery devices patented by workers of Federal Laboratories between 1922 and 1927. The company even developed a robbery prevention system disguised as light bulbs: once installed in a bank vault, the bulbs flooded the space with tear gas if triggered during a break-in. The company's advertising for the gas billy shouted its goals: "A New Weapon that Gets Them All!" Federal Laboratories became one of the nation's leading suppliers of gas weapons and other crime prevention products.





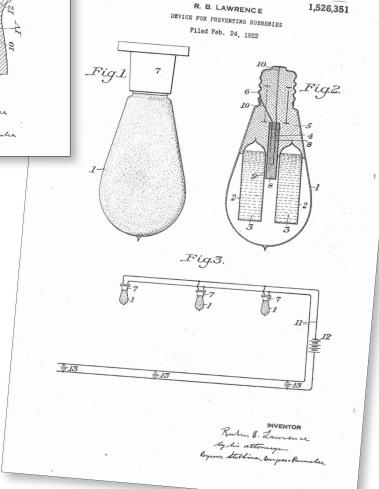
Ruben B. Lawrence of Bellevue, working for Federal Laboratories, applied for a patent for this hand weapon used to manually control a spray of "incapacitating gas" in December 1922.

Below:

Feb. 17, 1925

This patented robbery prevention system, also developed by Ruben Lawrence for Federal Laboratories, Inc., included a detonating charge and an electric igniter inside a receptacle resembling a light bulb. The bulbs, wired to a push button system, could be detonated by bank employees to help stop a robbery.
U.S. Patent 1526351.

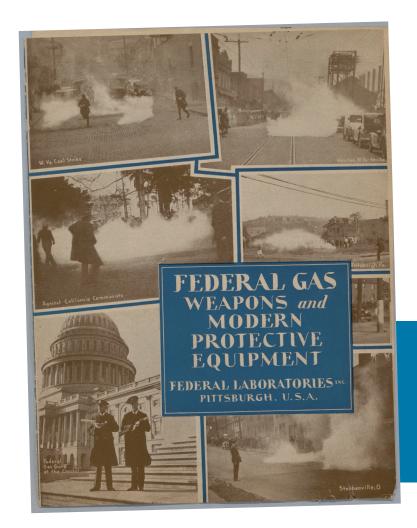
Inevitably, a preventive tool born from the horrors of war raised darker questions about the intersection of technological innovation, civic fear, and civil liberties. By 1937, Federal Laboratories was one of many American munitions companies being investigated by the U.S. Senate for selling weapons abroad and profiting from anti-union activities.7 Company officials never denied such charges, noting that it was standard practice to identify markets that needed their products. "We certainly are in one hell of a business when a fellow has to wish for troubles so as to make a living," the company's export manager reportedly once said.8 True enough.



UP FRONT

The nightsticks at the History Center remind us that technological innovation sometimes emerges in moments of duress, and technology's path is difficult to predict. As J. Robert Oppenheimer once said, "When you see something that is technologically sweet, you go ahead and do it and argue about what to do about it only after you have had your ... success." It's a lesson that certainly keeps repeating itself.

- ¹ "Tear Gas Demonstration," Wilkes-Barre Times Leader, October 28, 1925.
- ² See for example: "'Gas Billy' for Protection of Bank Messengers will blind bandits who come within fifty feet," The Journal News (Hamilton, Oh.), April 17, 1925; "Tear Gas in Bank," Washington Missourian, December 24, 1926; "Demonstrator Here," The Warren Tribune (Warren, Pa.), April 21, 1928; "Use of Tear Gas Shown at Police Station Here," The Escanaba Daily Press (Escanaba, Calif.), July 21, 1928; and "Gas Billy and Hand Grenades Received by Police at Upland," The San Bernardino County Sun (San Bernardino, Calif.), March 20, 1930.
- ³ "Former Police Head Advocates National Detective System," *The Pittsburgh Post*, January 4, 1921.
- ⁴ The event dominated newspaper headlines for most of the week, see for example: "Bandits Stage Raid in Heart of Northside; Shoot Man; Escape with \$34,000; One Caught," *The Pittsburgh Post*, June 11, 1921; and "Detectives Find \$3,400 of Northside Bandit Loot," The Pittsburgh Post, June 12, 1921.
- Many scholars consider the first modern use of tear gas to have occurred during the Battle of the Frontiers, a series of clashes between Germany and France along the southern Belgium border in August and September 1914. See Anna Feigenbaum, "100 Years of Tear Gas," *The Atlantic* (August 16, 2014) as posted February 16, 2016, at http://www.theatlantic.com/international/ archive/2014/08/100-years-of-tear-gas/378632/.
- ⁶ The slogan appears on a postal mailer brochure for Federal Laboratories, Inc., that was sent to Dorchester Penitentiary, New Brunswick, Canada, c. 1929. Accessed at: http://anatomylesson.tumblr.com/post/92755554441/postalbrochure-mailed-to-dorchester-penitentiary.
- ⁷ See, for example: "Navy Man Got Commission for Latin American Order," *Reading Times*, September 20, 1934; Munitions Industry: Hearings before the Special Committee Investigating the Munitions Industry, United States Senate, 73rd (74th) Congress (United States: Government Printing Office, 1934); and Violations of Free Speech and Rights of Labor, *Digest of the Report of the Committee on Education and Labor*, United States Senate, 76th Congress (U.S. Government Printing Office, 1939).
- ⁸ Harold J. Ruttenberg, "Federal Laboratories: Strike-Breaker, Who Picks Cuba's President?" (Unpublished manuscript, 1935), Harold J. Ruttenberg Papers, Archives Service Center, University of Pittsburgh.
- ⁹ In the Matter of J. Robert Oppenheimer, Transcript of Hearing Before the Personnel Security Board, Atomic Energy Commission (Washington, D.C.: U.S. Government Printing Office, 1954), 81.



Catalog covers for Federal Laboratories, Inc., emphasized the company's national prominence as a distributor for a range of gas weapons and munitions. The turmoil of the 1920s and early 1930s gave the company wide leeway in promoting its products, a situation that many people increasingly challenged.

Jniversity of Pittsburgh, Archives Service Center, Harold J. Ruttenberg Papers