# SOME FIREARM ACCESSORIES AND MODIFICATIONS OF INTEREST TO THE ARMS STUDENT AND COLLECTOR

by M. D. Waite

I come before this sophisticated group with some trepidation – primarily because the devices I intend to illustrate and describe are, with few exceptions, of small intrinsic worth and no great rarity. Nevertheless, if only because of their diversity, they represent an intriguing field of interest to the arms student and technician. And more to the point, most of them are collectible.

I am sure that many members of this association have, on occasion, been approached by law enforcement officers, friends, or associates who have been seeking identification or information on a device that they feel is in some way related to the firearms field. Speaking from experience, it can be deflating to one's ego to admit lack of knowledge on such occasions. Possibly that is a very good reason for exposing ourselves, even if only briefly, to fields of interest other than our own. We can often learn something new, and later retrieval of miscellaneous information from our memory recesses, à la computer, can redound greatly to our credit and self-esteem.

Most of the devices to be scrutinized here were provided to increase the versatility and utility of existing firearms. All were made in some quantity; I have avoided one-of-a-kind items and prototypes not placed in at least limited production.

No claim for priority in invention or manufacture will be made; only that the devices covered will, in most instances, represent generally different mechanical ideas or approaches. And for lack of time, there are many that will not be illustrated or mentioned. Where actual specimens were not available to photograph, I have relied on catalog cuts and other illustrations.

My study of these devices has made me extremely cautious in saying who might have shot who with what. I believe I can convince you that it can be most unwise to make a snap judgement as to the type of firearm that might have been involved in any shooting incident.

Based on certain design criteria and use characteristics, I have arbitrarily classified these devices into five basic groups as follows:

I. Conversion units of non-insert barrel type.
II. Auxiliary insert barrels and insert barrel conversion units.
III. Auxiliary barrels of non-insert type.
IV. Auxiliary cartridges and cartridge holders.
V. Miscellaneous related items.

## I

*Conversion Units of Non-Insert Barrel Type*

1. *Early Springfield Armory .22/.45 Conversion Unit (figure 1)*

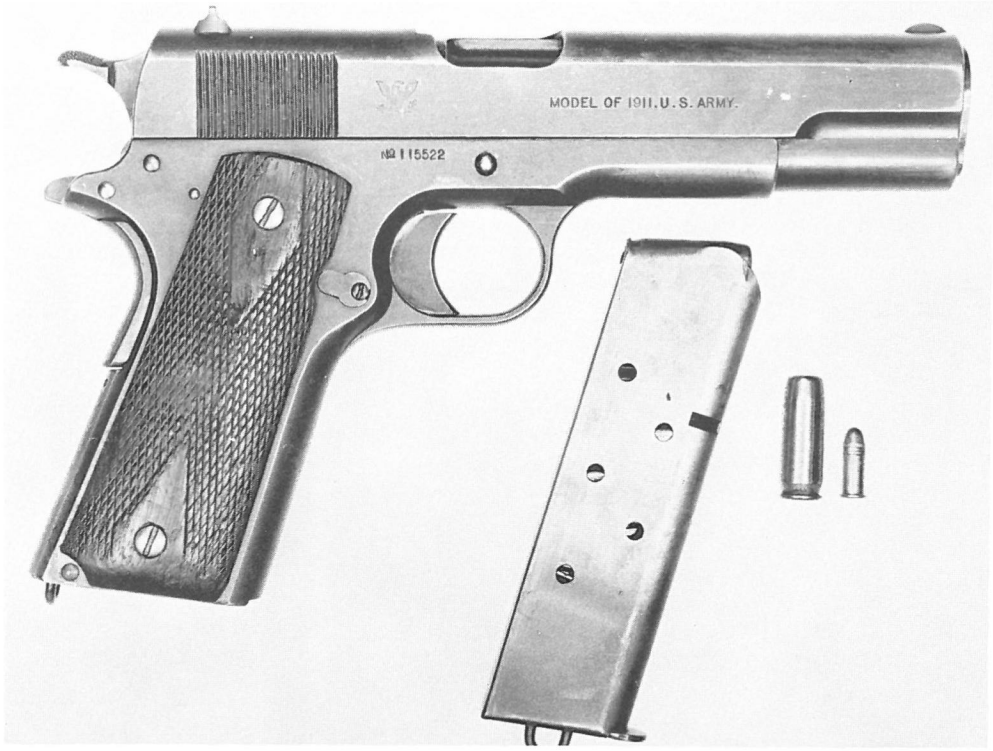
In 1913, Springfield Armory designed a .22 short rimfire conversion unit for the cal. .45 M1911 service pistol that utilized steel cartridge holders fed from the box magazine in the grip. The .22 cartridges were pressed into the holders with the fingers. The lightened .22 barrel in the unit was bored and chambered off-center so that the regular firing pin of the pistol would strike the rim of the .22 rimfire cartridge. The slide was operated manually, as recoil generated by the low-powered .22 short cartridge was insufficient to operate the mechanism semi-automatically. This unit was not recommended for adoption.

2. *Later Springfield Armory .22/.45 Conversion Unit (figure 2)*

After World War I, Springfield Armory resumed work on developing a .22 rimfire conversion unit for the cal. .45 service pistol. Units were made subsequently in both .22 short and .22 long rifle chamberings. The unit shown here in cal. .22 long rifle operated semi-automatically and was fed from a box magazine in the grip. The bolt mechanism was in the rear of the fixed superstructure or barrel housing. This system was not adopted and development work continued. The Colt firm ultimately developed a semi-automatic version of the M1911 service pistol in cal. .22 long rifle. It was recommended for adoption in 1929 under the designation Colt Service Ace pistol.

3. *The Pedersen Device or "Automatic Pistol, Caliber .30. Model of 1918" (figures 3, 3A, 3B)*

This conversion unit was a top-secret invention of World War I. It was designed by J. D. Pedersen and was a semi-automatic firing mechanism for use in the standard Springfield Model 1903



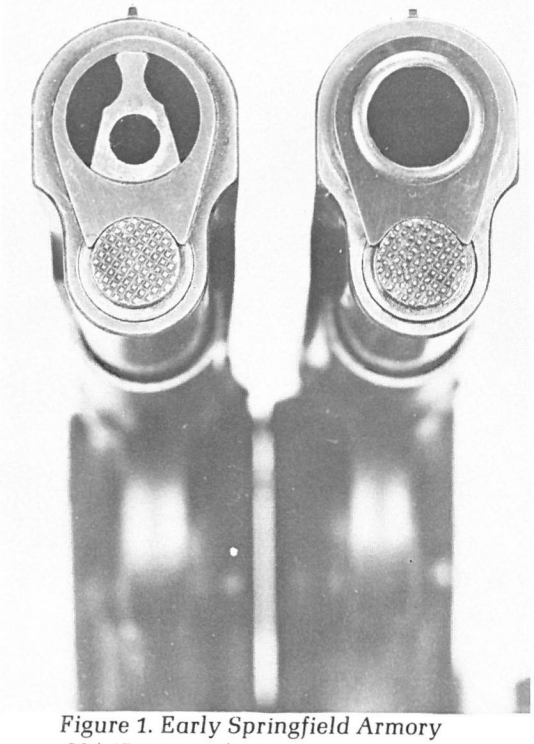



*Figure 1. Early Springfield Armory .22/.45 conversion.*


*Figure 2. Later Springfield Armory .22/.45 conversion unit.*

cal. .30 service rifle. It fired a small rimless cal. .30 cartridge with 80-gr. full metal jacket bullet. This device was a direct replacement for the bolt assembly of the rifle and was fed with a 40-shot detachable box magazine. Contents of the magazine could be exhausted as fast as the firer could pull the trigger of the rifle. Empty cartridge cases were ejected through a port in the left receiver wall.

Model 1903 rifles made for use with this device had the designation "Mark I" stamped on their receiver rings in addition to the usual markings. Approximately 65,000 Pedersen devices were made, but too late for use in combat. Most were destroyed during the 1920's. Pedersen devices were made experimentally for the U.S. Model 1917 and Russian Model 1891 rifles, both of which were made by U.S. firms during World War I.

4. *Stoeger .22 Caliber Attachment (figure 4)*

This cal. .22 long rifle single-shot attachment for Colt M1911-type pistols was sold by Stoeger Arms Corp. of New York City and was advertised in catalogs of that firm from 1931

Figure 3. Pederson Device

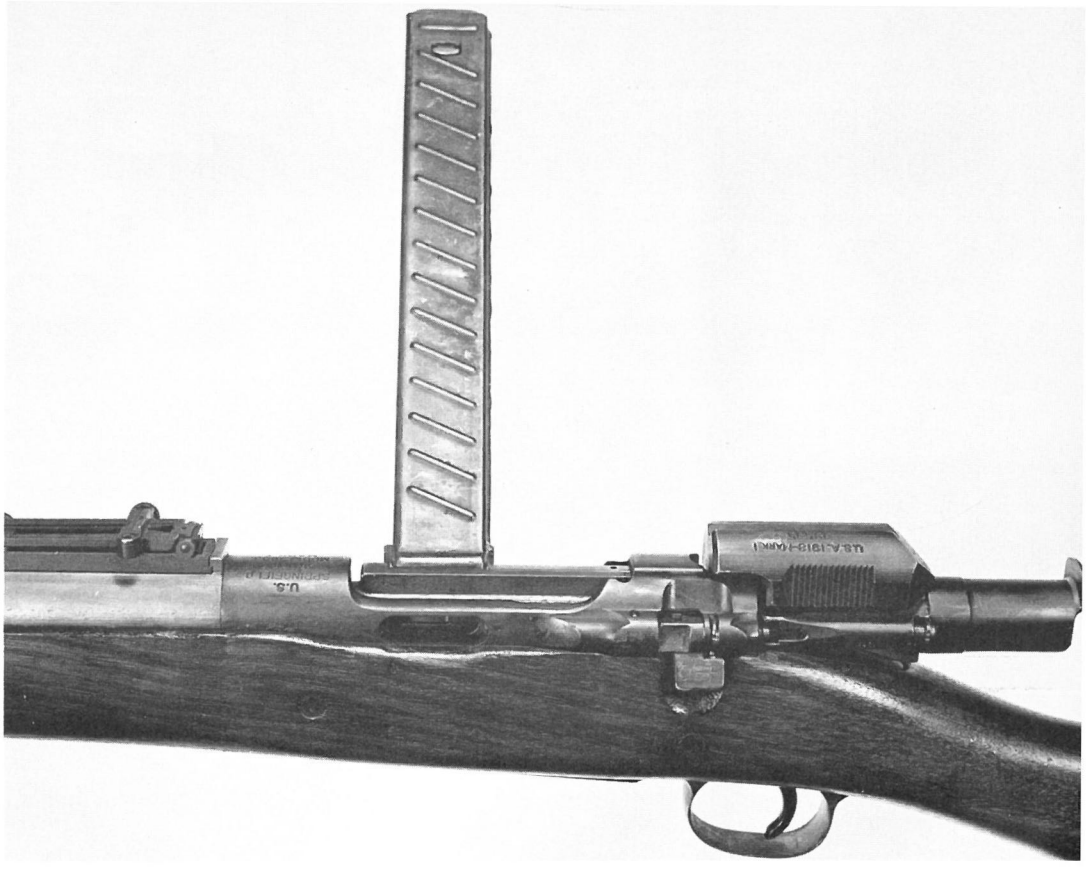


Figure 3A. This photo shows the basic components of the Pedersen device. Also required were a special trigger and sear assembly and a modified magazine cut-off.

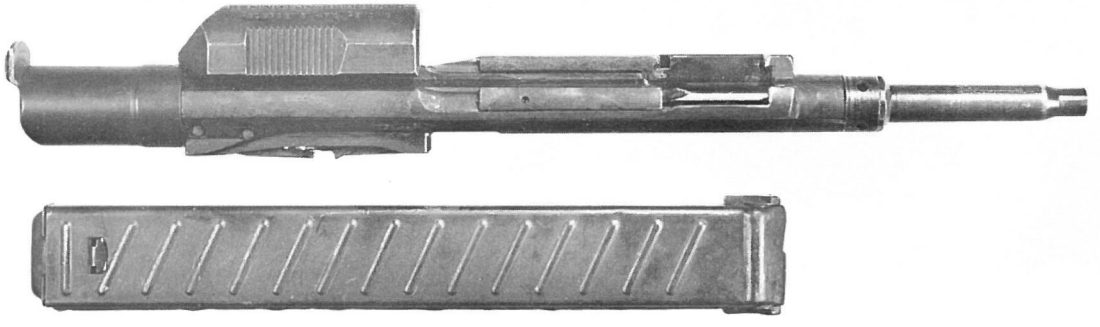
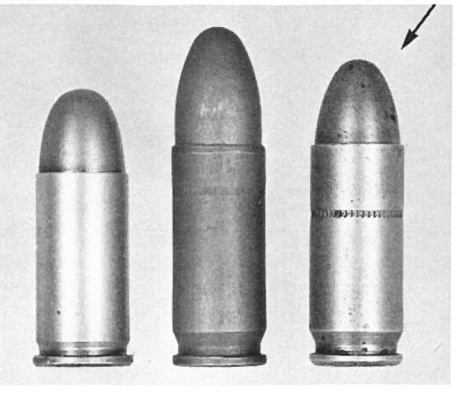


Figure 3B. In this illustration the cal. .30 Pedersen cartridge is on the far right and the .32 ACP pistol cartridge on the far left. The center round is the French 7.65 mm. Long developed after World War I. By coincidence it is practically identical with the .30 Pedersen round.



through 1934. Of tip-up type, hinged at the front end, the attachment was a direct replacement for the slide and barrel assembly of the pistol. This device is found with both sliding button and pivoted latch barrel releases. Tilting the barrel upward actuates the extractor and lifts the cartridge case so that it can be grasped with the fingers.

5. *U.S. Machine Gun, Cal. .22 T1 (M1) — Conversion Unit (figure 5)*

In 1935, Springfield Armory developed a conversion unit to provide full-automatic fire with the .22 long rifle rimfire cartridge in the Model 1917 Browning water-cooled machine gun. This device utilized the Williams floating chamber principle to develop full-automatic functioning. The .22 long rifle cartridges were inserted into steel cartridge holders that were in turn placed in a standard 250-round cloth machine gun belt. This illustration shows the parts needed to convert the cal. .30 gun to cal. .22. The second photo shows a complete cal. .22 T1 (M1) machine gun mounted on the standard tripod.

6. *Colt .22/.45 Conversion Unit (figure 6)*

Introduced in 1938, the Colt .22/.45 Conversion Unit allowed use of the economical .22 long rifle rimfire cartridge in the Colt M1911 cal. .45 and Colt .38 Super Automatic pistols. The conversion unit includes a slide and barrel assembly (less bushing), and a cal. .22 box magazine. This conversion unit represents another application of the Williams floating chamber principle.

At one time Colt's offered a similar .45/.22 Conversion Unit to convert the cal. .22 Service Ace pistol to cal. .45.

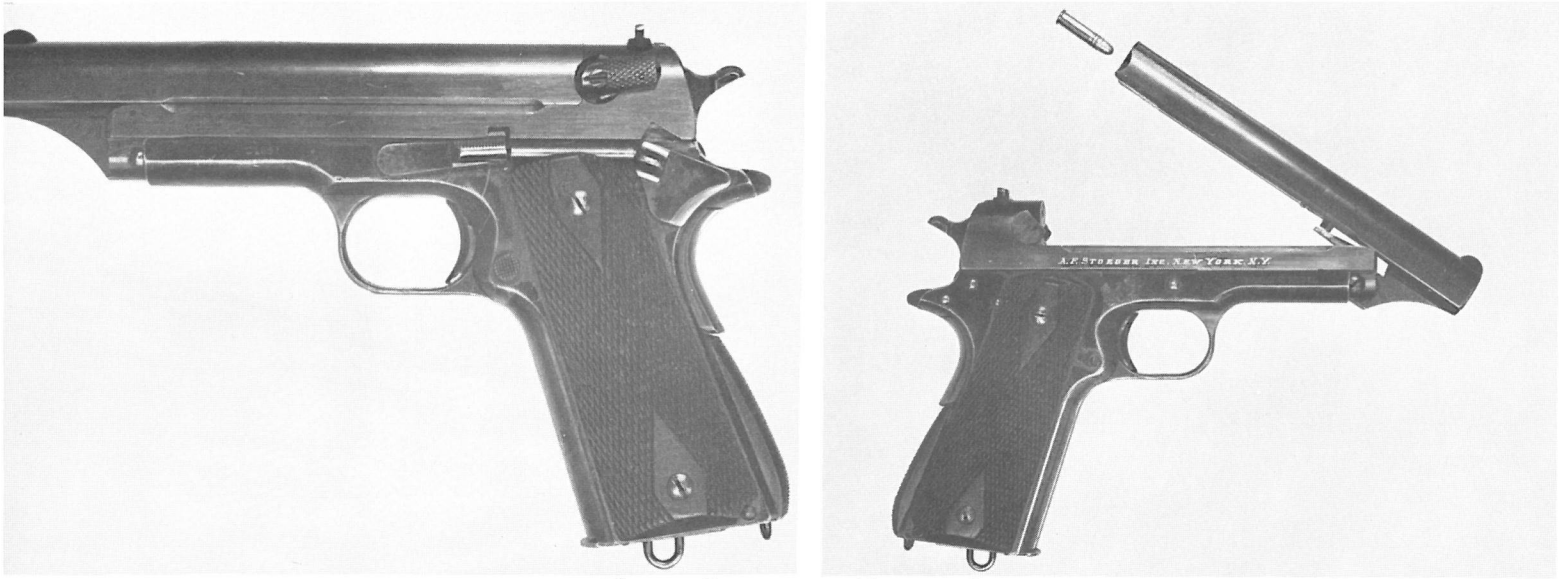


*Figure 4. Stoeger .22 caliber attachment.*

7. *Cartridge Holder For U.S. Trainer, Machine Gun, Cal. .22 M3, M4 and M5. (figure 7)*

Developed during World War II, the Trainer, Machine Gun, Cal. .22, consisted of conversion parts to alter various Browning ground and aircraft machine guns to fire the .22 long rifle rimfire cartridge full-automatically. As might be expected, this device also utilized the Williams floating chamber principle to develop recoil sufficient to function the gun mechanism. The cartridge holder shown here was made in two parts or sections held together by friction. A cloth machine gun belt fitted with metal clips held the front sections of the holders. The .22 long rifle rimfire cartridges were inserted by hand into the rear sections which were then pressed into the front sections to ready the belt for firing. On firing, the rear sections containing the fired .22 cases were ejected from the bottom of the gun into a collection bag. It was necessary to punch out the fired .22 cases by hand before the sections could be recharged with fresh .22 cartridges.

8. *Swiss SIG-Neuhausen 47/8 Semi-Automatic Pistol (figure 8)*

The SIG-Neuhausen 47/8 pistol introduced in 1948 was offered with interchangeable barrels in 9 mm. and 7.65 mm. Parabellum calibers and a .22 conversion unit and magazine for the .22 long rifle rimfire cartridge. In 9 mm. form this pistol became the official Swiss sidearm in 1950. A 4 mm. gallery practice conversion unit was also made for this pistol.

9. *High Standard Supermatic - Olympic Conversion Units (figure 9)*

In 1955, the High Standard Manufacturing Corp. of Hamden, Conn., introduced their Supermatic target pistol in cal. .22 long rifle, and their Olympic model in cal. .22 short. Soon thereafter, it became possible to buy the slide, barrel, and magazine assembly in one chambering to convert the pistol to the other chambering. An aluminum alloy slide was used with the lightly-charged .22 short cartridge and a heavier steel slide with the more powerful .22 long rifle round.

10. *Colt .38 AMU Conversion Unit (figure 10)*

During the late 1950's Colt introduced a conversion unit kit to convert Colt M1911-type semi-automatic pistols to fire the .38 AMU cartridge. Made under Government contract for the Army Advanced Marksmanship Unit (AMU) at Fort Benning, Ga., these kits were used by AMU armorers in converting M1911 pistols for match use. The kit consisted of a slide, barrel, bushing, recoil spring, ejector, extractor, firing pin assembly, and magazine.

11. *Ruger Single-Six Convertible Revolver (figure 11)*

Introduced in 1961, this cal. .22 single-action revolver was furnished with two cylinders; one in cal. 22 Winchester Rimfire Magnum and the other in cal. .22 long rifle. Several popular single-action revolvers of foreign and domestic make are also available with interchangeable cylinders for both rimfire and center-fire cartridge combinations.

12. *Mayer & Sohne Model 32 Revolver (figure 12)*

This modern double-action, hinged-frame revolver is made in West Germany by the Mayer & Sohne firm. It is available with interchangeable .22 long rifle and .22 Winchester Magnum cylinders as well as extra barrel and cylinder assemblies for the .32 S&W Long and .32 ACP cartridges. There are two firing pins in the standing breech to provide either rimfire or center-fire ignition, and the hammer nose has a rocker device that can be changed according to the ignition mode desired.

This system of interchangeability recalls that of the Smith & Wesson Model 1891 Cal. .38 revolver that was optionally available with .38, .32, and .22 long rifle single-shot barrels for use with the same frame assembly.

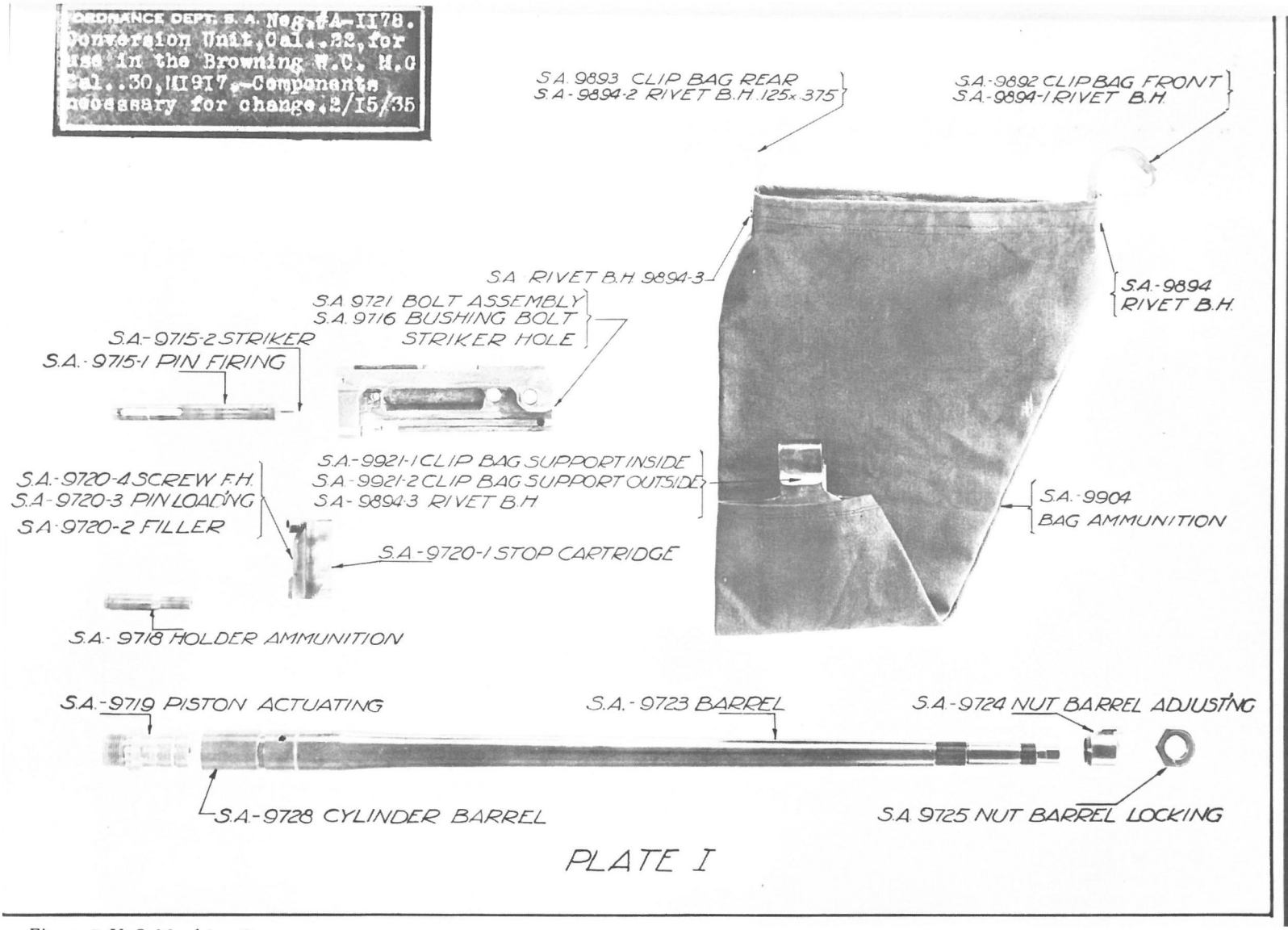



*Figure 5. U. S. Machine Gun, caliber .22 TI (M1) — conversion kit.*

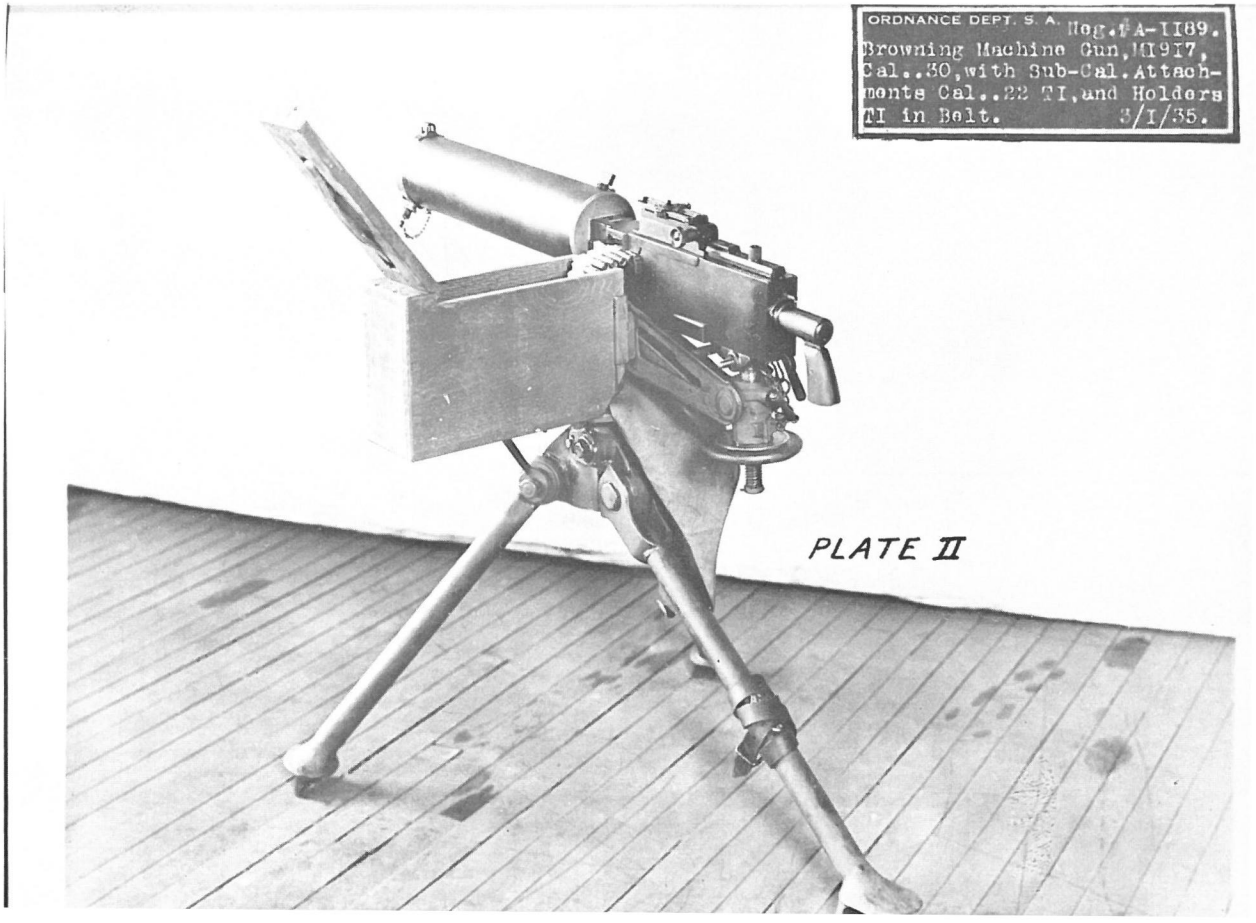



Figure 6. Colt .22/.45 conversion kit.

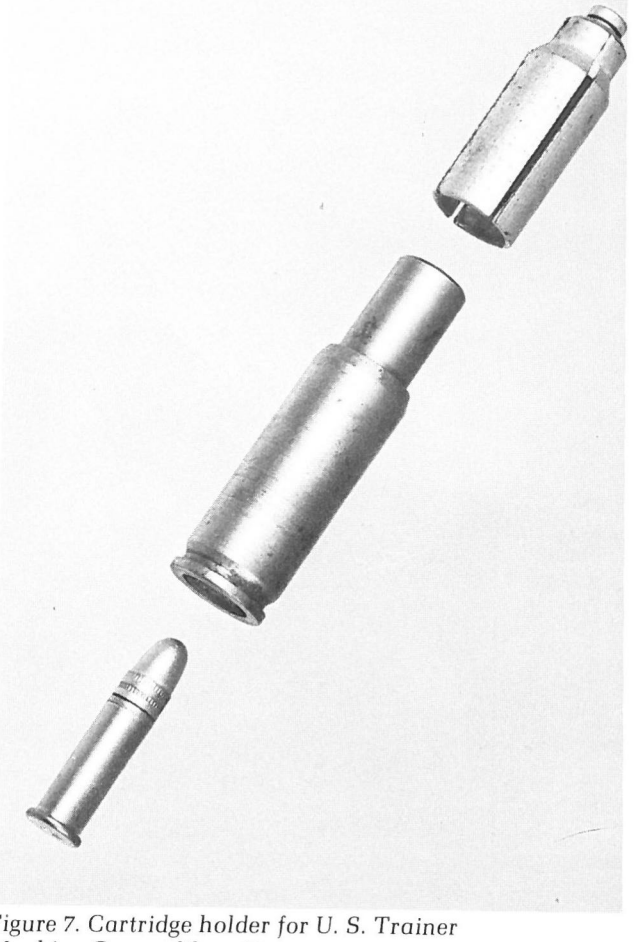


Figure 7. Cartridge holder for U. S. Trainer Machine Gun, caliber .22


Figure 8. SIG-Neuhausen 47/8


*Figure 9. High Standard Supermatic — Olympic conversion kits.*

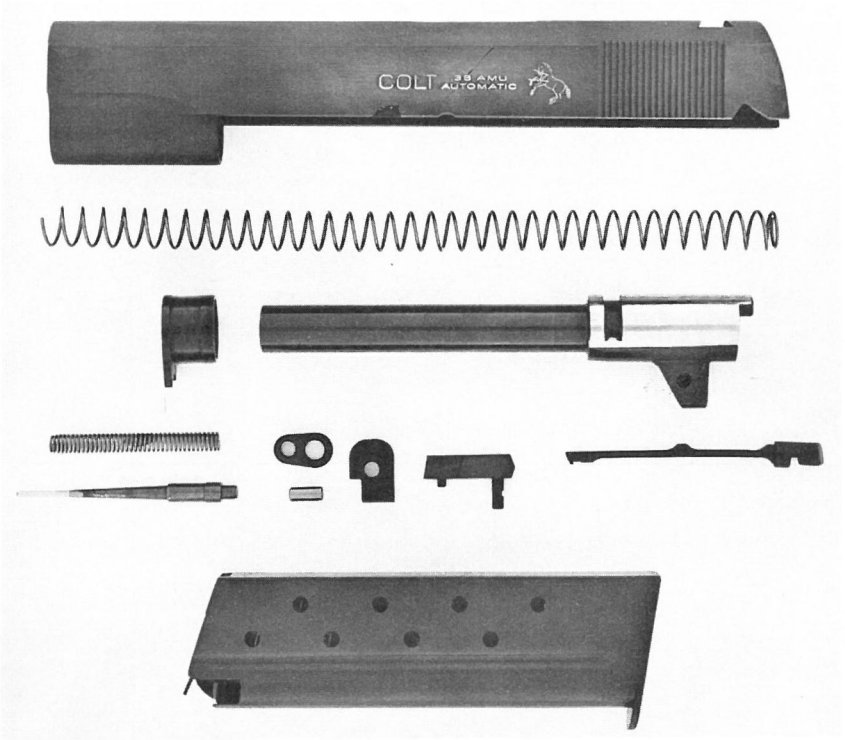



*Figure 10. Colt .38 AMU conversion unit.*

*Figure 10A. This photo shows a cal. .45 M1911A1 service pistol frame fitted with the .38 AMU conversion unit.*


*Figure 10B. This photo shows the standard rimmed .38 Special wadcutter bullet cartridge (1.) and the semi-rimless .38 AMU round. The only difference in these cartridges is in rim design. The .38 AMU cartridge, also called .38 Semi-Rimless, was designed to give improved feeding in the box magazines of M1911-type pistols. It has not been offered commercially as a standard catalog item.*

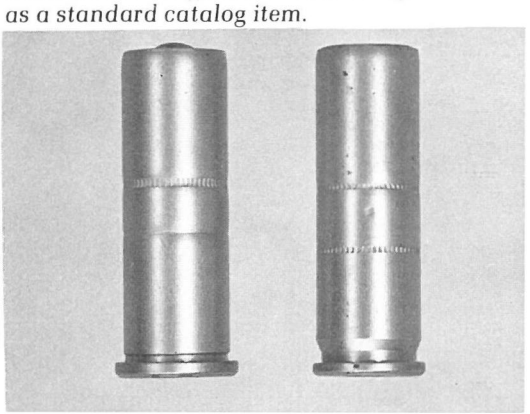



*Figure 11. Ruger Single-Six Convertible Revolver.*

II

*Auxiliary Insert Barrels and Insert Barrel Conversion Units*

13. *Dreyse Insert Barrel (figure 13)*

This reloadable rifled insert barrel made in the shape of a rimmed rifle cartridge was designed to provide low-cost indoor target practice with military rifles. Developed in Germany at the Dreyse Musket Factory, it was tested at Springfield Armory in 1890. In use, a Berdan rifle cartridge primer, which provided the propellant force, was inserted into the hinged base of the device after which a spherical lead ball was pressed into the barrel portion. Turning the base into place seated the ball in the rifling and readied the unit for firing.

14. *Remington Auxiliary Rifle Barrel (figure 14)*

Introduced during the early 1880's, this auxiliary rifle barrel was adapted to 10-, 12-, and 16-ga. break-action shotguns. It was listed in the 1901 Remington Arms Co. catalog as being "rifled and chambered for any central-fire cartridge mentioned in our list".

According to the catalog, this insert barrel was made in 30" and 32" lengths with integral extractor and was claimed to shoot accurately up to 500 yards.

15. *Morris and Aiming Tubes (figure 15)*

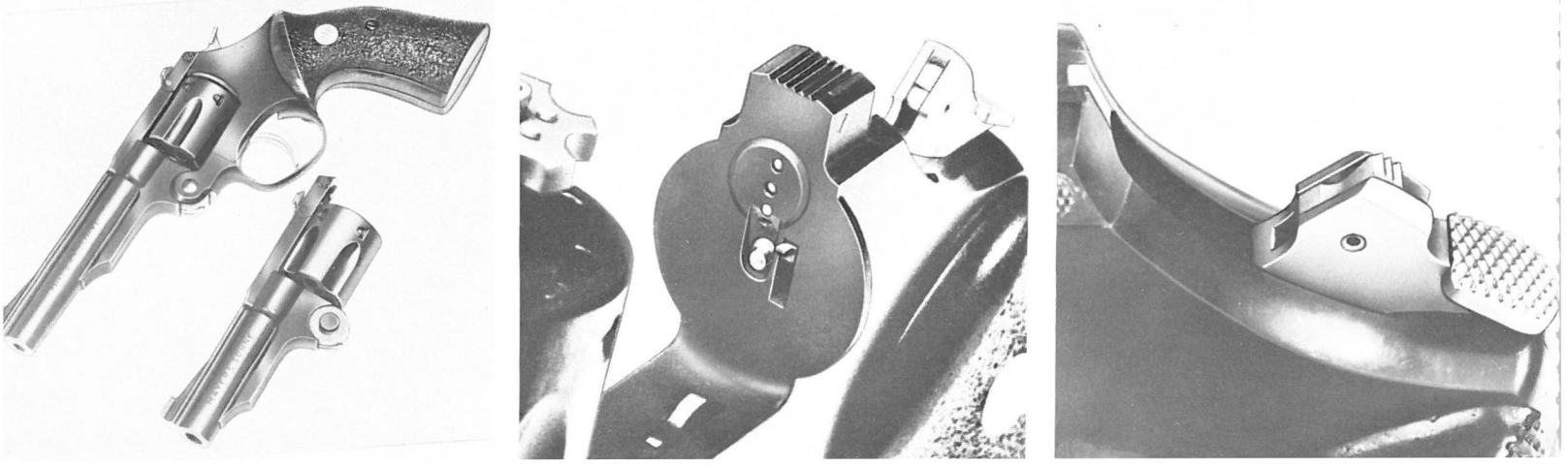
On April 25, 1881, Richard Morris was granted British Patent No. 1773 detailing the use of either rimfire or center-fire cartridges in rifled liners inserted in rifled bores. This sub-caliber system was adopted by the Royal Navy in 1883 and was not declared obsolete until 1923.

The Morris tube system was adapted to many rifles and handguns. This illustration from a 1933 Parker-Hale catalog depicts a typical Morris tube assembly for use in rifles, as well as a so-called "Aiming Tube" developed later on the Morris tube principle.

16. *Elterich Rifled Bullet Shell (figure 16)*

Patented on April 23, 1901, by Elterich & Co., of New York City, this insert barrel was advertised in the *Sporting Goods Dealer* and other sporting publications through 1905. It was made in 10-, 12-, and 16-ga. sizes and was chambered for the .25-20 WCF, .32 Short S&W, .32 Colt's New Police, and .32-20 Winchester cartridges. The 10-ga. model was also available in .38 Special chambering. This device contained its own extractor actuated by the extractor of the shotgun in which it was used. It could be used in both single- and double-barrel shotguns.

*Figure 12. Mayer & Sohne Model 32 Revolver.*



17. *Webley Single-Shot Adaptor Tube for Service Pistols (figure 17)*

Introduced by the British Webley firm in June 1905, this device was chambered initially for the .297/.250 Long or Short Morris cartridges. The unit shown here is chambered for the .22 long rifle cartridge.

18. *Zimmerpatrone or Einsteckpatrone for* 4 mm. *Model 20 Ubungsmunition (figure 18)*

This steel practice cartridge is chambered and rifled for the tiny 4 mm. Model 20 center-fire Ubungsmunition cartridge developed in 1921 by Dr. Carl Weiss of the German RWS firm. It was an improvement over the earlier rimmed 4 mm. practice cartridge introduced in 1920 by the Gustav Genschow & Co. firm. The GECO cartridge was of rimmed bottle-neck type and was primed for both rimfire and center-fire ignition.

The Zimmerpatrone device was made in numerous metric calibers ranging from 7 mm. Mauser through the 11.15x60R.

19. *Sedgley .38-.32 and .45-.22 Sub-Caliber Insert Barrels — Early Type (figure 19)*

This illustration from a 1930 circular issued by R. F. Sedgley, Inc., Philadelphia, Pa., shows the early-type Sedgley sub-caliber barrel designed to convert the .45 M1911 pistol and .38 Colt Super Automatic pistol to shoot the .22 long rifle rimfire cartridge. This barrel was used with the standard slide, barrel, and bushing assembly, and was secured by a threaded collar nut at the muzzle end. This device permitted single-shot fire only, with individual cartridges loaded into the breech end of the barrel with the fingers. The barrel was chambered and bored off-center so that the pistol's center-fire firing pin would fire the .22 rimfire cartridge.

20. *Parker's Auxiliary Cartridge Adapter for Shotguns (figure 20)*

The A. G. Parker & Co. firm first offered their Auxiliary Cartridge Adapter for Shotguns in 1927. Of European manufacture, it was of admittedly poor quality and the Parker firm eventually manufactured their own. As listed in their 1932 catalog, this insert barrel was available in 12-, 16-, and 20-ga. sizes for the .410-bore shotshell, and in 12- and 16-ga. sizes for 28-ga. and 32-ga. shells, respectively. As made prior to World War II, these adapters were steel, but those of current manufacture offered by Parker-Hale are aluminum. Adapters of similar

*REPORT OF A BOARD CONVENED TO TEST THE DREYSE MUSKET FACTORY GALLERY-PRACTICE DEVICE.*

NATIONAL ARMORY, *September* 8, 1890.

The gallery-practice device tested consists of a piece of steel similar in exterior shape and dimensions to a complete metallic cartridge of the arm in which it is prepared for use, bored and rifled for shot of different sizes (those tried were arranged for shot 0.14 and 0.19 inch in diameter), and fitted at the rear end with a hinged crosspiece, which when turned into place, presses the shot into the grooves of the rifling. This crosspiece also serves as the anvil for an ordinary flat cap or primer of which the fulminate furnishes the charge that expels the shot.

Fig. I, herewith, shows the device open.

*Fig. 1.*

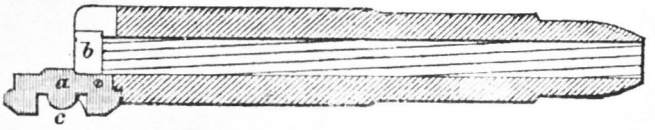
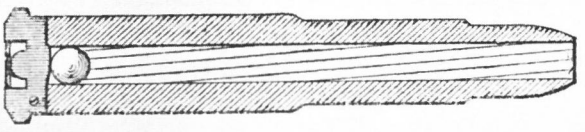



Figure 13. Dreyse Insert Barrel

Fig. II, the device loaded, ready for firing.

*Fig. 2.*



In Fig. I, *b* is the recess into which the shot is first dropped, *a* the crosspiece open, and *c* the anvil. The crosspiece being thin, and only bridging across and not closing the recess *b*, the force of the discharged fulminate is expended upon the shot.

The device was accompanied with an ejecting rod for removing the discharged primer and a cleaning brush for cleaning and lubricating the bore.

In accordance with the directions accompanying the apparatus the shot were lubricated by dropping a little oil upon them and then freely shaking.

# Remington Auxiliary Rifle Barrel

The Remington Auxiliary Rifle Barrels extend the *entire* length of the shotgun barrel, and are held firmly in place by a thumb nut at the muzzle. They shoot accurately up to 500 yards, and can be inserted into any shotgun and taken out with perfect ease, thus making the most desirable combined shotgun and rifle. Weight, about two pounds.

*These barrels are not adapted for high pressure smokeless powder cartridges.*

AUXILIARY RIFLE BARREL

| | |
|---|---|
| With extractor, 30 and 32-inch, for any 10, 12 and 16-gauge shotgun, rifled and chambered for any central-fire cartridge mentioned in our list . . | $10 00 |
| Front and rear sights for auxiliary rifle barrel . . . . . | 2 00 |

*When ordering, state calibre and grain of cartridge required.*

*Figure 14. Remington Rifle Barrel.*

## MORRIS AND AIMING TUBES.


**A bit of Sport with your Service Rifle.**

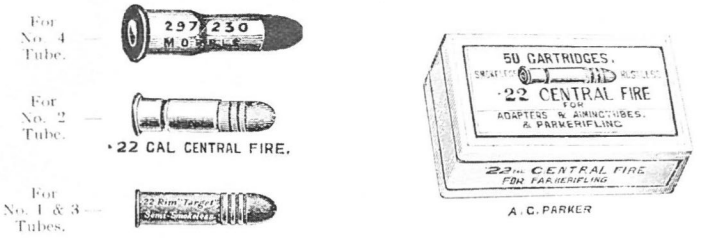



*Figure 15. Morris and Aiming Tubes*

**Morris Tubes** were the means by which the 19th Century soldier obtained his preliminary firing exercises. As shown it consisted of a rifled tube complete with breech piece and extractor, taking a bottle shaped central fire cartridge known as ·297/230 (Morris) cartridge.

This was slipped into the Service Rifle barrel and fired and extracted with the ordinary bolt.

A later development is known as the **Aiming Tube** which takes the well-known ·22 cal. long rifle Cartridge.

Outwardly, it is similar to the Morris Tube **but its great drawback was the necessity of providing a special bolt for striking the edge of the rim fire cartridge.**

It did not need much discernment to have foreseen that the detachable tube had become superfluous from a training standpoint and that the ·22 cal. Service Rifle adopted later was the logical solution of the training problem.

It frequently happens that we are asked to provide Morris Tubes for use in Service Rifles with ·22 cal. rim fire Cartridges, and in nine cases out of ten our correspondent thinks that no addition to his rifle is necessary. **He overlooks the fact that his central Fire Bolt will not detonate the rim-fire cartridge.**

There are the following alternatives :—

(1) A ·22 cal. Aiming Tube and a substitute Service Rifle rim fire bolt complete for **45**/-

(2) A ·22 cal. Aiming Tube at **25**/- with **central fire** long rifle cartridges at **9**/- per 100

(3) **A newly designed ·22 cal. Aiming Tube** with necessarily delicate breech mechanism which fires a ·22 cal. rim fire cartridge actuated by the central fire striker at **50**/- Cartridges **3**/- per 100, *illustrated below.*

(4) A ·297/230 cal. Central Fire Morris Tube at **25**/- Long Cartridges **11**/3 per 100.

These prices include a fitted box for keeping the Tube in safety.

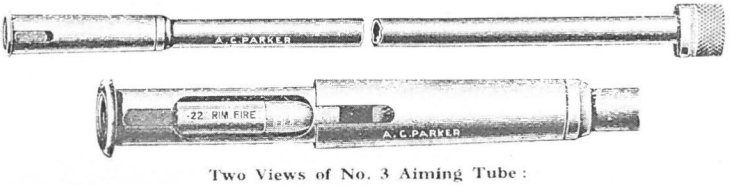
We recommend :—

No. 1. for rough and continuous use.

No. 2. for cheap first cost and occasional use because of the extra cost of cartridges.

No. 3. in the hands of a careful user.

No. 4. for occasional use where such cartridges are obtainable.




**Two Views of No. 3 Aiming Tube :**

**Top View**—shows **Breech Closed.** **Bottom View** shows **Breech Open.**

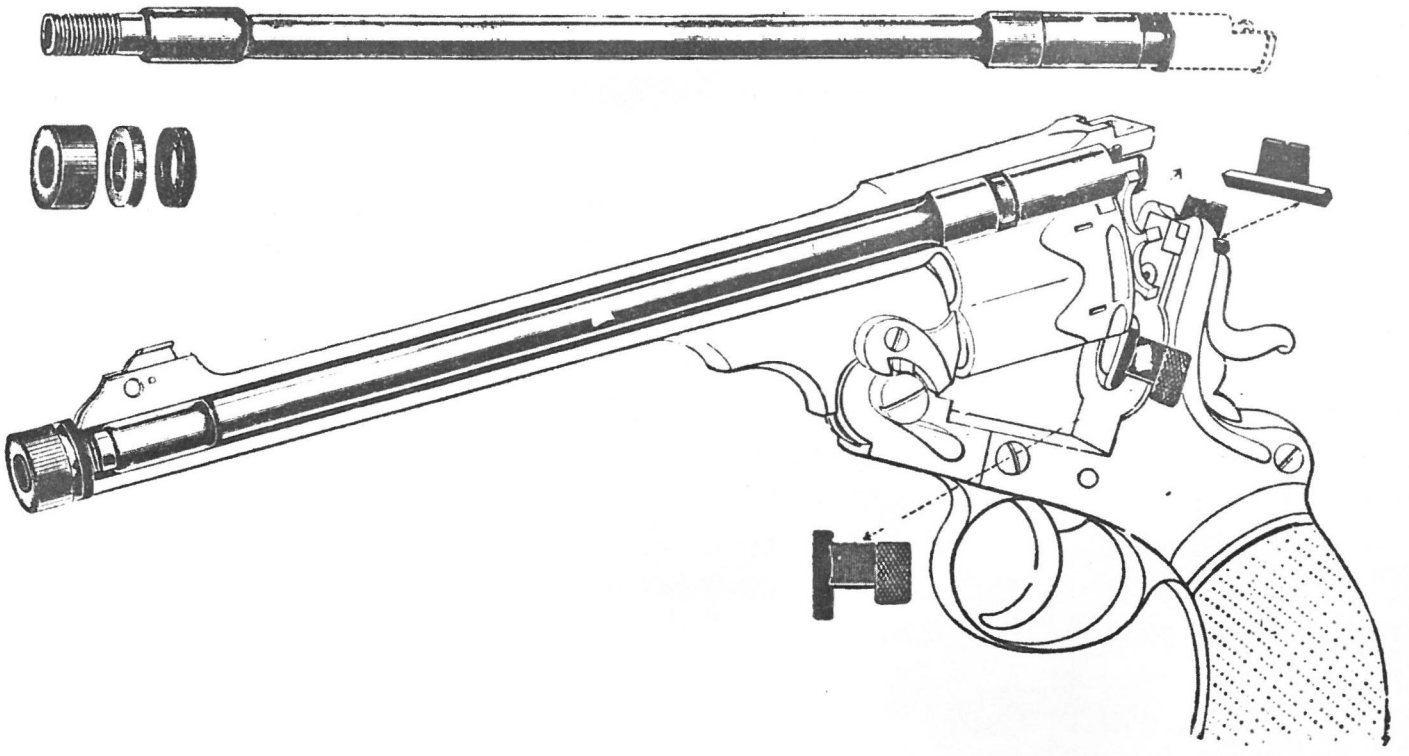


FIG. LI. .297/.230 No. 5 Morris Tube single shot adaptor fitted to a .476 W.G. revolver

Government models, Wilkinson's apparatus was ertised as a 'Revolver Transformer'. Despite central-fire cartridges. Some years elapsed, ever, before the last tube adaptor was discar

*Figure 15A. This illustration shows a typical Morris tube assembly installed in a British .476 Webley service revolver. It is chambered for the .297/.230 center-fire cartridge.*

*Figure 15B. This photo illustrates several cartridges used in various Morris tube adaptors. From left to right they are the .297/.250 Rook rifle, .297/.230 Morris Long, .297/.230 Morris Short, .22 center-fire, and .22 long rifle rimfire. All of these cartridges with the exception of the .22 long rifle are now obsolete. The special .22 center-fire cartridge is identifiable by the deep annular ring around the case body.*

construction are made in England by the Webley & Scott firm.

21. *Erma .22 Conversion Unit for Luger Pistol (figure 21)*

This famous conversion unit adapting the Luger pistol for semi-automatic function with the .22 long rifle rimfire cartridge was introduced in 1934 by Erfurter Maschinen und Werkzeug Fabrik of Erfurt, Germany. It consists of an insert barrel, toggle breechblock assembly, and magazine for the .22 long rifle cartridge. This device has been made to fit both 7.65 mm. and 9 mm. Luger pistols.

22. *Parker's Rifled Adapter for Shotguns (figure 22)*

As illustrated in the 1932 A. G. Parker & Co. catalog, the Parker rifled adapter for shotgun barrels was made to order only, and was chambered optionally for the .25 ACP, .297/.250, .300 Rook rifle, and .22 center-fire cartridges.

23. *Parker-Hale .22/.38 Six-Shot Adaptor for the .38 Cal. Enfield Service Revolver (figure 23)*

As shown in the 1939 Parker-Hale catalog, this conversion unit consisting of a 6-shot cylinder and insert barrel adapted the British .38 Enfield service revolver to fire the .22 long rifle rimfire

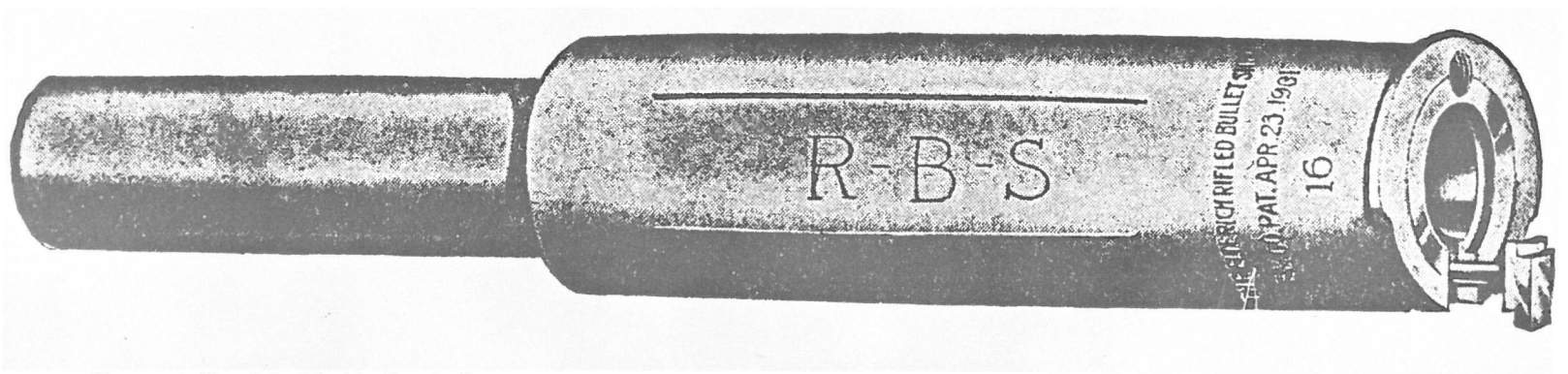



*Figure 16. Elterich rifled bullet shell.*

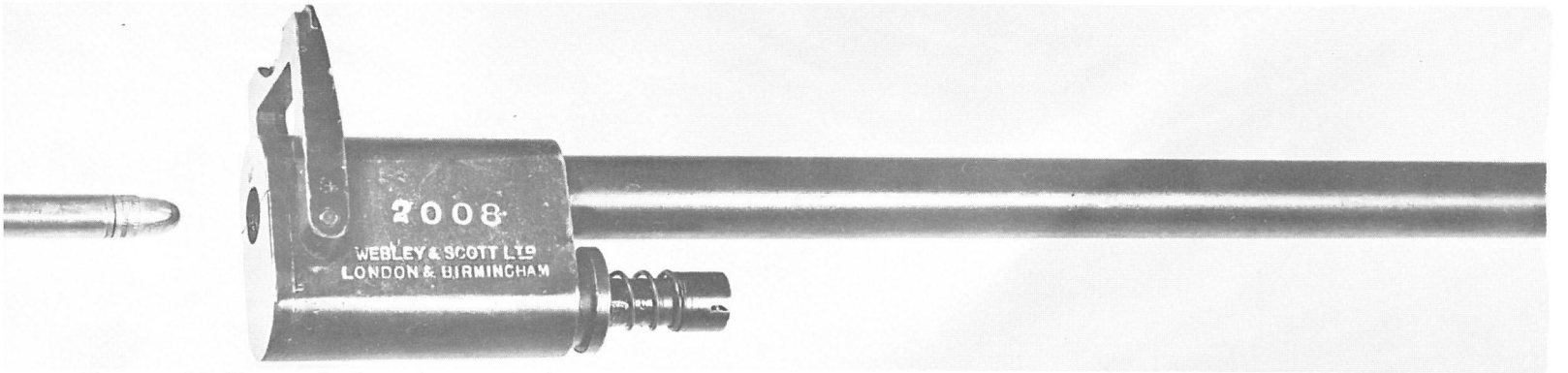



*Figure 17. Webley single shot adaptor tube for service pistols.*

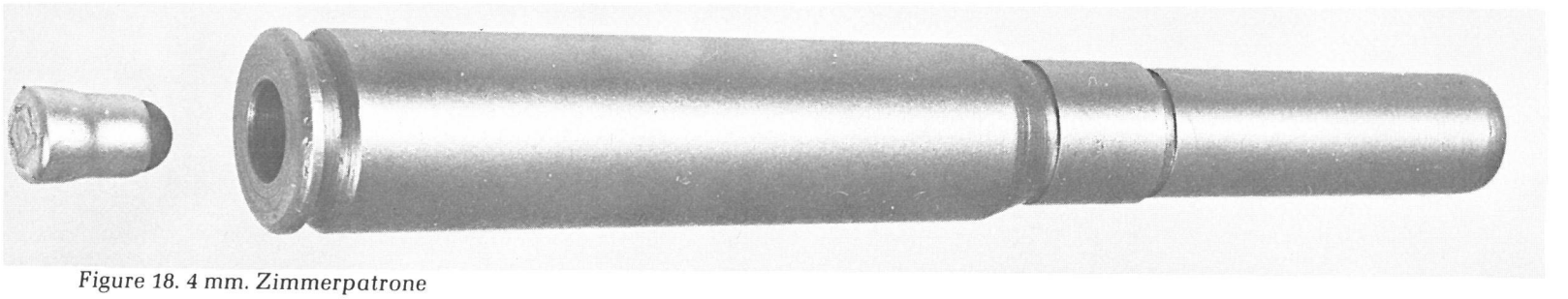


*Figure 18. 4 mm. Zimmerpatrone*

cartridge. The cartridge chambers in the cylinders are angled inward to align their mouths with the bore of the insert barrel.

24. *Walther Model PP Cal. .32 ACP Pistol with 4 mm. Insert Barrel (figure 24)*

This insert barrel is chambered for the 4 mm. M. 20 cartridge. The barrel is inserted into the cal. .32 barrel and held in place by a collar nut at the muzzle end. The 4 mm. M. 20 cartridge is loaded into the chamber of the insert barrel with a special loading spoon. Fired cases are expelled from the barrel by a clearing rod inserted through the muzzle end.

A similar insert barrel adapted for use with a steel cartridge holder is made by Walther for use in Walther and other German-made semi-automatic pocket pistols. The 4 mm. M. 20 cartridges are pressed into steel cartridge holders which are then loaded into the box magazine and functioned through the pistol by working the slide manually.

25. *Krieghoff Insert Barrel (figure 25)*

Introduced prior to World War II, Krieghoff insert barrels are adapted to break-open shotguns in 12-, 16-, or 20-ga. They have been chambered for a variety of cartridges including the .22 long rifle, .22 WMR, .22 long rifle shot (smoothbore), and 5.6x35R Vierling.

26. *Browning "Super-Tube" (figure 26)*

Made for use in Browning Superposed 12-ga. shotguns, the Super Tubes are smoothbore insert barrels chambered for 20-ga., 28-ga. and .410-bore shotshells. Two tubes in a given chambering constitute a set. Ejection is automatic. Similar insert barrels are made by C. W. Purbaugh of Monrovia, Calif., and by Savage Arms in .410-bore only.

27. *Armax Auxiliary Barrel (figure 27)*

Made in 12-, 16-, and 20-ga. sizes, the Armax Auxiliary Barrel was introduced in 1956 by the Armax Co. of Fort Worth, Texas. Chambered for the .22 long rifle cartridge, this rifled insert barrel has two neoprene rings around the body to hold it in place and align it with the shotgun chamber. The .22 chamber is bored off-center so that the rimfire cartridge is fired by the shotgun's center-fire firing pin.

28. *Barrelette Auxiliary Shotgun Barrel (figure 28)*

This smoothbore insert barrel made for use in break action shotguns was introduced in 1948 by The Barrelette Co. of Cranford, N.J. It was made in 12-, 16-, and 20-ga. sizes. Average length of the unit is 9½″ and it was chambered for the .22 long rifle shot cartridge. The device has a built-in extractor actuated by the shotgun's extractor. The enlarged chamber reinforce and anti-fouling tube on the front end are brass; the barrel proper is steel. A quantity of these insert barrels was sold in 1966 by Numrich Arms Corp. of West Hurley, N.Y.

29. *Erma Model I Bolt-Action Conversion Unit for Center-Fire Rifles (figure 29)*

This single-shot conversion unit adapting certain bolt-action center-fire rifles for the .22 long rifle or .22 extra long cartridges was introduced during the 1920's by Erfurter Maschinen und Werkzeug Fabrik of Erfurt, Germany. The device combined a rifled insert barrel with a bolt-action breech assembly to replace the original bolt in the rifle. The conversion unit was inserted into the breech end of a Mauser M98 or Mannlicher M95 rifle. Twin locking lugs on the forepart of its receiver body engage locking lug recesses within the receiver of the rifle to hold it in place.

Production of this conversion unit by Erma was resumed after World War II. Similar units for use in Swiss military rifles are made in Switzerland also.

30. *Numrich M1903 Springfield .22 Conversion Unit (figure 30)*

In 1958, Numrich Arms Corp. introduced a .22 long rifle conversion unit for use in any cal. .30 Springfield rifle. The unit consisted of a 24″ insert barrel, an M2 Springfield bolt assembly, a wrench to lock the insert barrel in the receiver, and an M1903A3 trigger guard assembly modified to hold a detachable M2 Springfield .22 long rifle box magazine. The insert barrel for this unit was made by the Marlin Firearms Co.

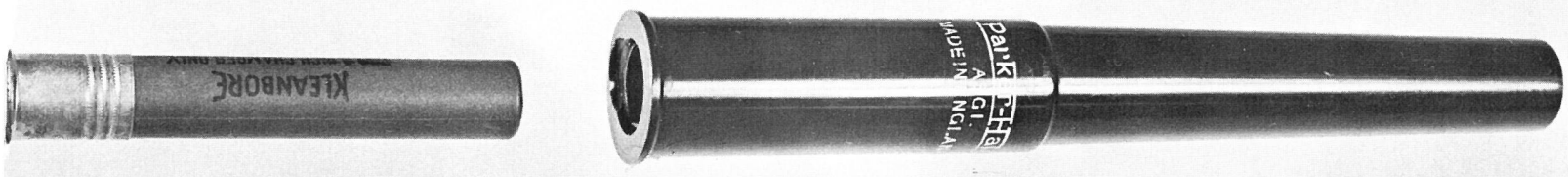
31. *Lothar Walther Insert Barrels for Center-fire Pistols and Revolvers (figure 31)*

These illustrations of insert barrels are from a 1964 leaflet of the German Lothar Walther firm. The upper unit made for use in cal. 9 mm. Luger pistols has an independent firing pin assembly that is angled to strike the rim of the .22 long rifle rimfire cartridge. In use, the firing pin assembly is loaded into the barrel in rear of the .22 cartridge and is extracted like a cartridge when the slide is retracted or toggle functioned. The fired .22 case must be punched out of the barrel with a clearing rod inserted through the muzzle end.



*Figure 19. Sedgley insert barrels.*

*Figure 20. Parker's Auxiliary Cartridge Adaptor for shotguns.*



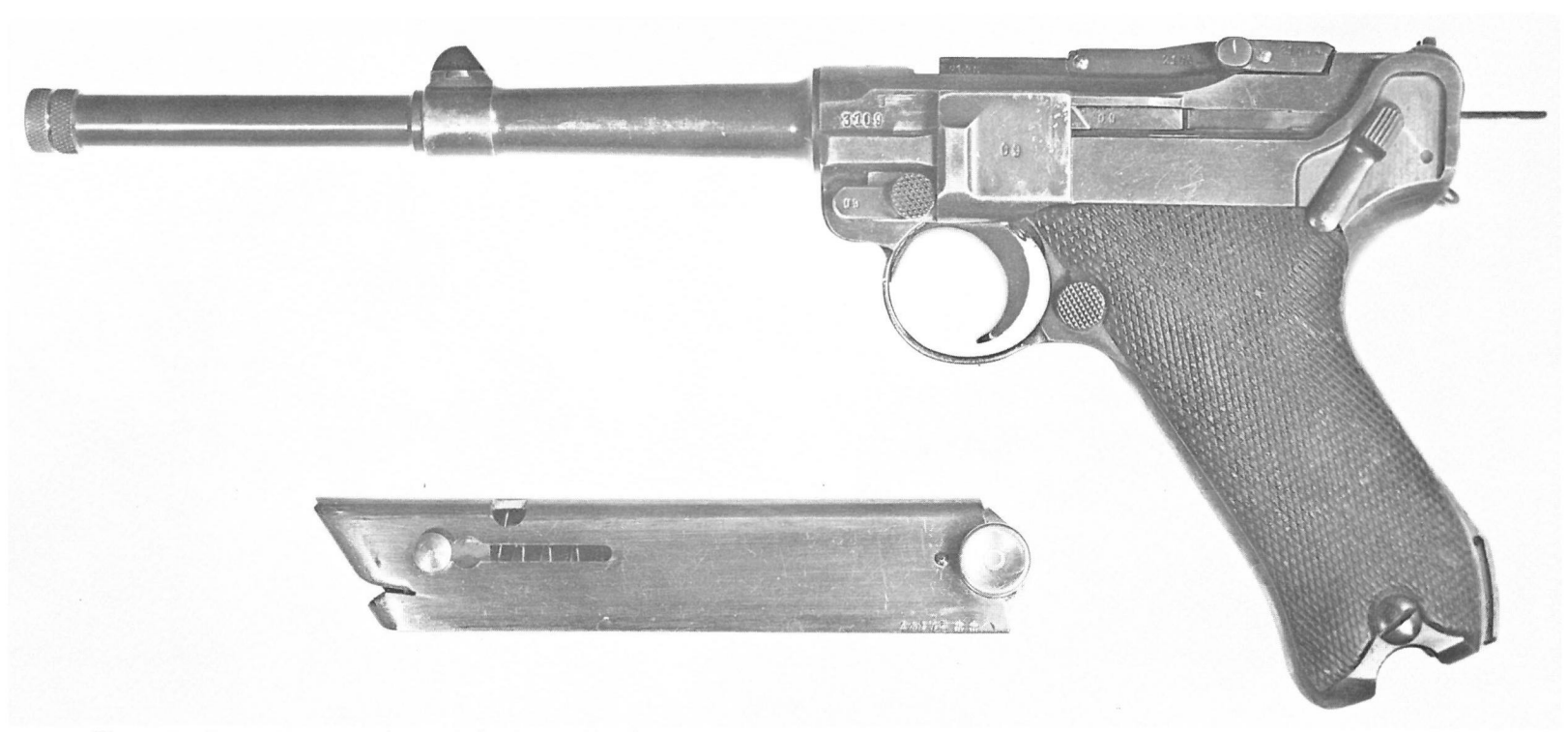


*Figure 21. Erma .22 conversion unit for Luger Pistol*

The lower unit adapted to center-fire revolvers has a 4 mm. insert barrel held in the revolver barrel by a collar nut on the muzzle end. The 4 mm. M. 20 center-fire cartridges are inserted into steel adapters for loading into the chambers of the revolver.

Pictured is the Lothar Walther insert barrel chambered for the .22 long rifle rimfire cartridge is adapted to any cal. .45 M1911-type semi-automatic pistol, It is retained in the pistol barrel by a collar nut on the muzzle end. The separate firing pin assembly is loaded into the chamber of the cal. .45 barrel in rear of the .22 cartridge. The firing pin assembly is extracted when the slide of the pistol is retracted manually. The fired .22 case must then be punched out of the insert barrel with a clearing rod inserted through the muzzle end.

32. *Walther P-38 Pistol Conversion Unit (figure 32)*

This device permits semi-automatic functioning of the .22 long rifle cartridge in the Walther P-38 9 mm. pistol. It has been imported by Interarms Ltd., of Alexandria, Va., and consists of a slide assembly, .22 long rifle insert barrel, and a 10-shot capacity detachable box magazine.

III

*Auxiliary Barrels Of Non-Insert Type*

33. *Savage Model 99 Auxiliary .410-bore Barrel (figure 33)*

Introduced by Savage Arms in the 1920's, this auxiliary barrel was adapted to takedown Savage Model 99 lever-action rifles. It permitted single-shot use of the 2-inch .410-bore shotshell in the Model 99 rifle. In use, the fired shotshell was extracted and ejected by operating the finger lever. A loaded shell could then be loaded into the chamber of the barrel and the action closed to ready the gun for firing. This illustration is from the 1925 Savage Arms Co. catalog.

34. *Savage Utility Gun (figure 34)*

The Savage Model 220 "Utility Gun" in 12-, 16-, and 20-ga. furnished with an interchangeable .30-30 Winchester barrel was announced by Savage Arms in March 1938. For the export trade a similar combination with 20-ga. shotgun barrel and rifle barrel in .25-20 WCF chambering was available also. This gun was soon superseded by a complete series of 11 different models providing various combinations of shotshell and rifle cartridge chamberings.

35. *Fiala Magazine Pistol (figure 35)*

This pistol in cal. .22 long rifle was introduced in 1920 by the Fiala Arms & Equipment Co. of New Haven, Conn. It was available with three quick-interchangeable barrels in 2¾", 7½" and 20½" lengths. A shoulder stock attachment was also available for use with the rifle-length barrel.

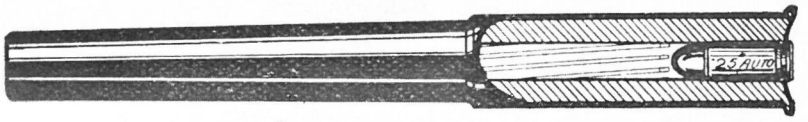
A total of 4044 Fiala pistols was manufactured up to 1923 when production was discontinued. Sale of this pistol continued until about 1928.

Although it resembled the Colt Woodsman and similar blowback-operated semi-automatic pistols, the Fiala pistol was not capable of semi-automatic fire. It was necessary to function the slide by hand to extract the fired case, chamber a fresh round, and cock the lock mechanism.

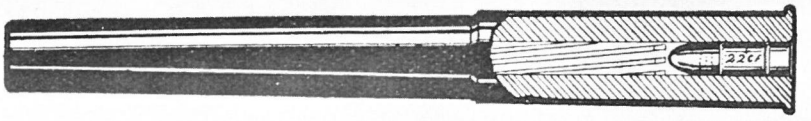
36. *Sedgley .38-.22 and .45-.22 Sub-Caliber Barrels—Late Type (figure 36)*

This illustration is of a later Sedgley sub-caliber barrel as featured in Sedgley catalogs around 1937. Like the earlier version, this barrel was used to convert Colt cal. .45 M1911 and Colt Super .38 Automatic pistols to fire the .22 long rifle cartridge. It was employed with a standard slide and bushing assembly, and was fitted with a link so that it was retained in the gun by the slide-lock pin. Empty

# PARKER'S RIFLED ADAPTERS
for shot Guns.




SHEWS .25" CAL. AUTO PISTOL CARTRIDGE
IN PARKER'S 20 GAUGE RIFLED ADAPTER.




SHEWS .22" CENTRAL FIRE CARTRIDGE IN
PARKER'S 20 GAUGE RIFLED ADAPTER.

Following the successful introduction of our ·410 shot cartridge Adapters, we have been asked to supply rifled adapters for use in shot guns also and we show above partly sectioned views of two of these.

The top illustration shows the Adapter loaded with a ·25 cal (6·35 m/m) Automatic Pistol cartridge which costs **12/-** per 100, and the second is loaded with a new ·22 cal. long rifle cartridge having a central fire anvil, which costs **8/6** per 100.

Accuracy is reasonably good considering that the means of sighting on a shot gun are so crude, but as it is doubtful whether such adapters will be of more than very limited utility, we are not making a line of them, but are prepared to make them to order for the following cartridges :—

·22 cal. Central Fire ·297/250, ·25 cal. Pistol, ·300 Rook Rifle at a cost of **25/-** each.

*Figure 22. Parker's rifled adaptor for shotguns.*



# THE Parker-Hale ·22/38 SIX SHOT ADAPTER

FOR THE .38" cal. ENFIELD SERVICE REVOLVER.

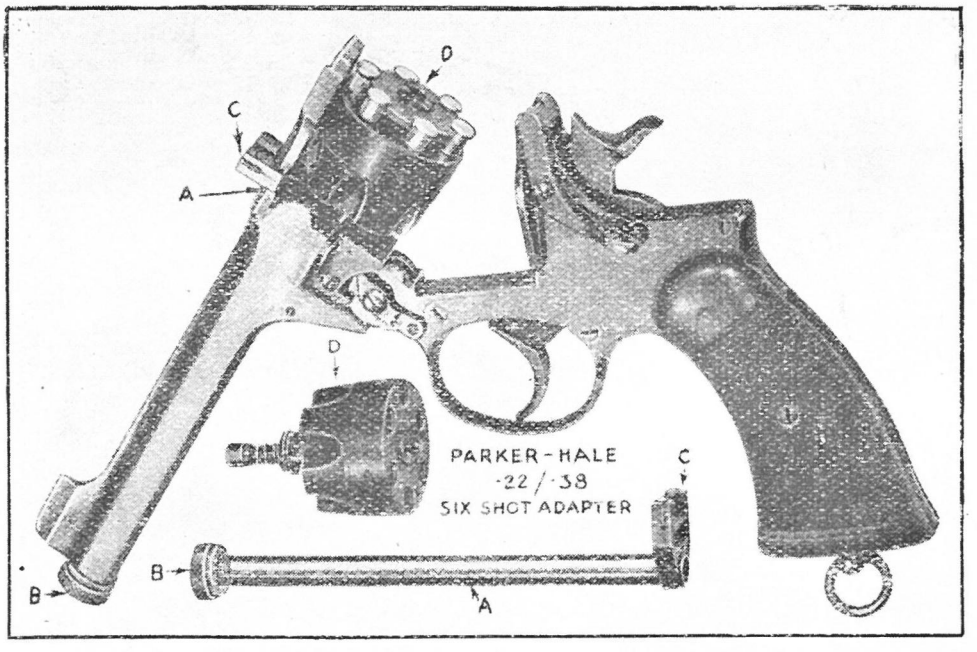



*Figure 23. Parker-Hale .22/.38 six-shot adaptor for the Enfield service revolver.*

An Adapter for .22" calibre rim fire cartridges is now available for the new .38" calibre Army revolver, made at Enfield Small Arms Factory.

The Adapter is substantially the same as the one for the .455" calibre Webley revolver except that the part carrying the backsight is a fixture on the .22" calibre barrel and there is no sleeve on the barrel fixing nut.


*Figure 24. Walther PP 7.65 mm with 4 mm insert*

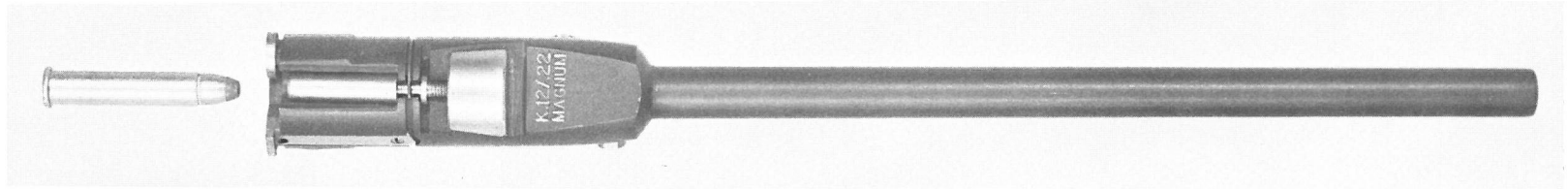
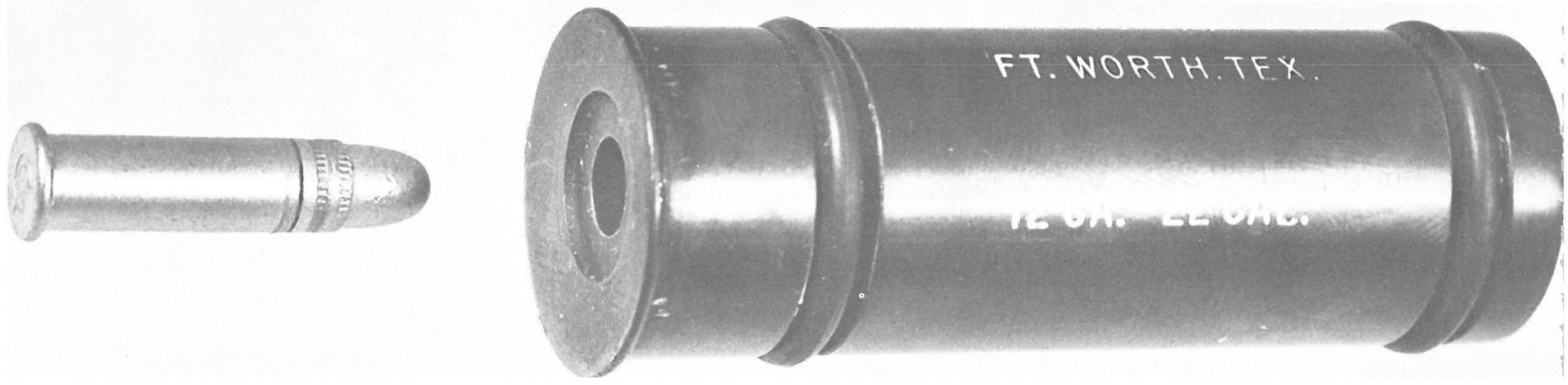



*Figure 25. Krieghoff insert barrel.*

*Figure 26. Browning "Super-Tube"*

*Figure 27. Armax Auxiliary Barrel*



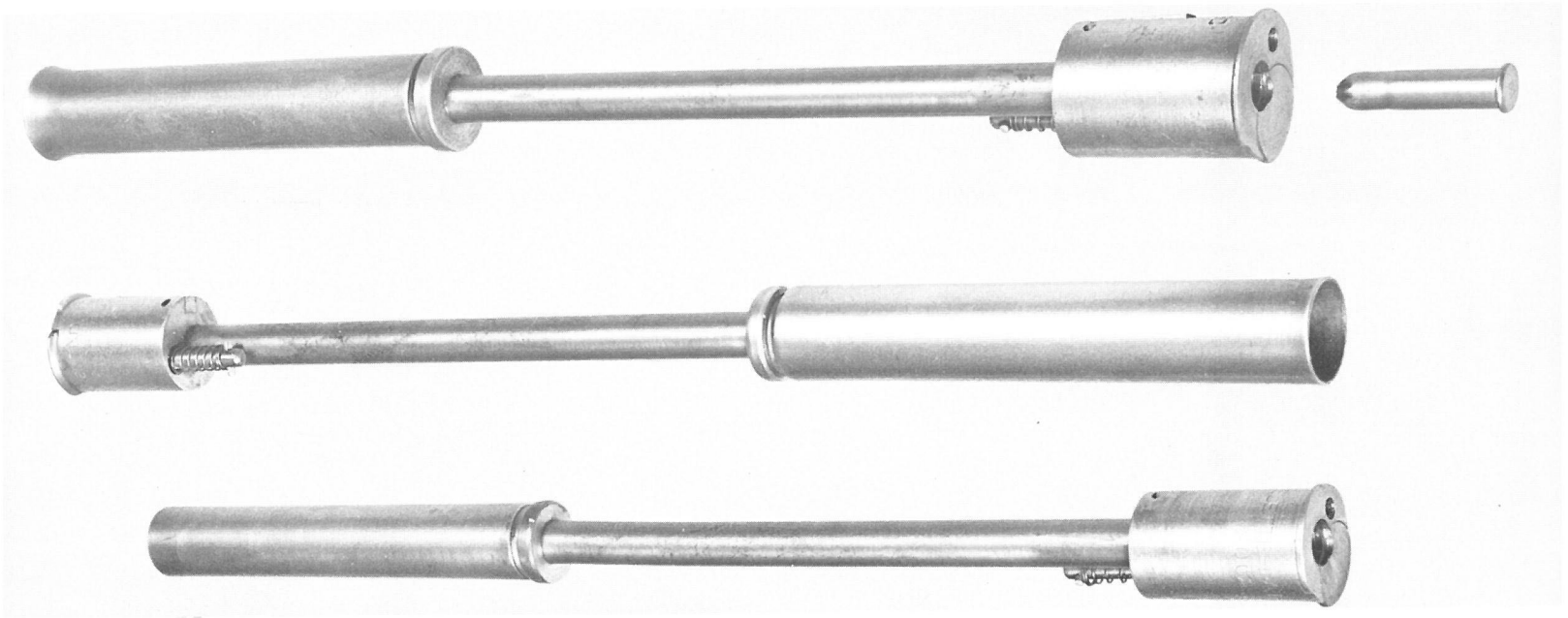
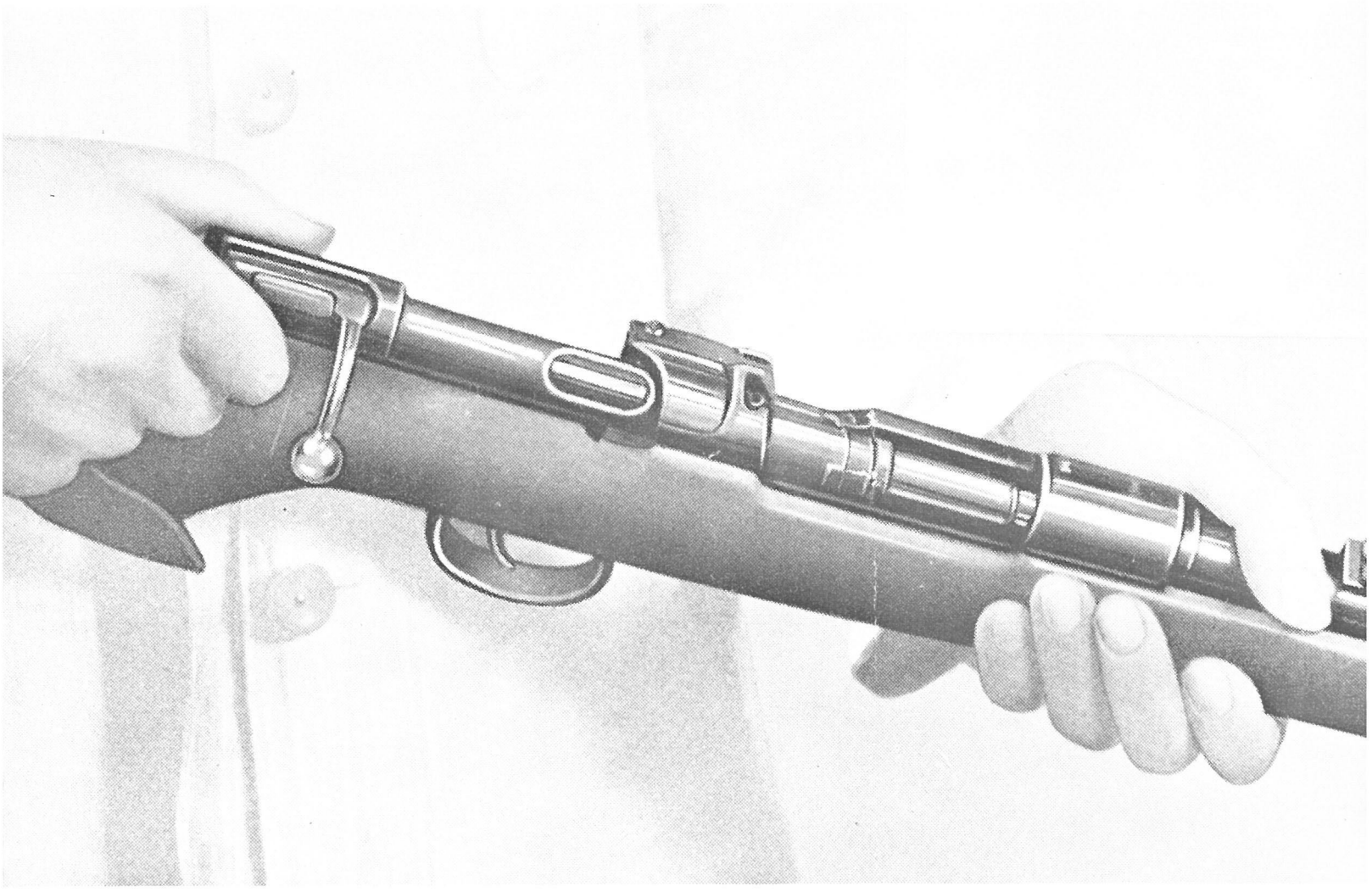


*Figure 28. Barrelette Auxiliary Shotgun Barrel.*

*Figure 29. Erma Model I bolt action conversion unit for rifles*



cartridge cases were extracted and ejected by retracting the slide manually. Fresh cartridges were single-loaded into the barrel chamber by hand. This barrel was bored and chambered off-center so that the center-fire firing pin of the pistol would fire the .22 rimfire cartridge.

37. *Walther Model PP Cal. .32 ACP Pistol with 4 mm. Conversion Barrel (figure 37)*

This Walther pistol has a full-diameter barrel in 4 mm. caliber and is chambered for the Walther steel adapter which is in turn chambered for the 4 mm. M. 20 center-fire cartridge. In use, the adapters loaded with M. 20 cartridges are functioned through the regular .32 ACP box magazine by working the slide manually.

38. *Walther .32 ACP Adapter or Cartridge Holder for 4 mm. M. 20 Center-Fire Cartridge (figure 38)*

This is a typical steel Walther adapter or cartridge holder chambered for the 4 mm. M. 20 cartridge. When fired, the empty M. 20 cartridge case must be punched out of the holder before a fresh cartridge can be inserted.

39. *F. I. Combination Rifle-Pistol (figure 39)*

In 1962, Firearms International Corp. of Washington, D.C., introduced the "F. I. Combo" assembly consisting of a French-made Unique cal. .22 long rifle 10-shot pocket pistol with 3″ barrel in combination with an accessory shoulder stock having an integral 18″ barrel with plunger assembly for operating the pistol slide.

39-A. To assemble the pistol in the shoulder stock unit, it is first necessary to remove the barrel and magazine from the pistol. The pistol, minus these parts, and with slide retracted, is then inserted into the shoulder stock and locked in place by replacing the magazine in the pistol frame. With pistol in place, the assembly functions as a shoulder-fired semi-automatic rifle.

40. *Norwegian .22/.45 Sub-Caliber Barrel Assembly for M1911-Type Pistols (figure 40)*

Adapted to M1911-type cal. .45 ACP pistols, this Norwegian-made device consists of a cal. .22 steel barrel and steel cartridge holders chambered for the .22 long rifle rimfire cartridge. The adapter chamber and rifled bore in the barrel are off-set so that the firing pin in the pistol slide will strike the .22 rimfire cartridge close to the rim. The steel adapters are designed to function through the magazine. The recoil spring and slide weight must be balanced properly to insure reliable semi-automatic function with this system. Its operating principle is similar to that of the earlier device developed at Springfield Armory in 1913.

41. *Whitney .38/.45 Sub-Caliber Barrel (figure 41)*

This sub-caliber barrel for use in Colt M1911-type semi-automatic pistols was made by rechambering a standard Colt .38 Super Automatic barrel for a non-standard "wildcat" .38/.45 cartridge made by necking down the .45 ACP cartridge case to accept cal. .38 bullets. The barrel shown here is sold by Whitney Sales Inc. of Reseda, Calif.

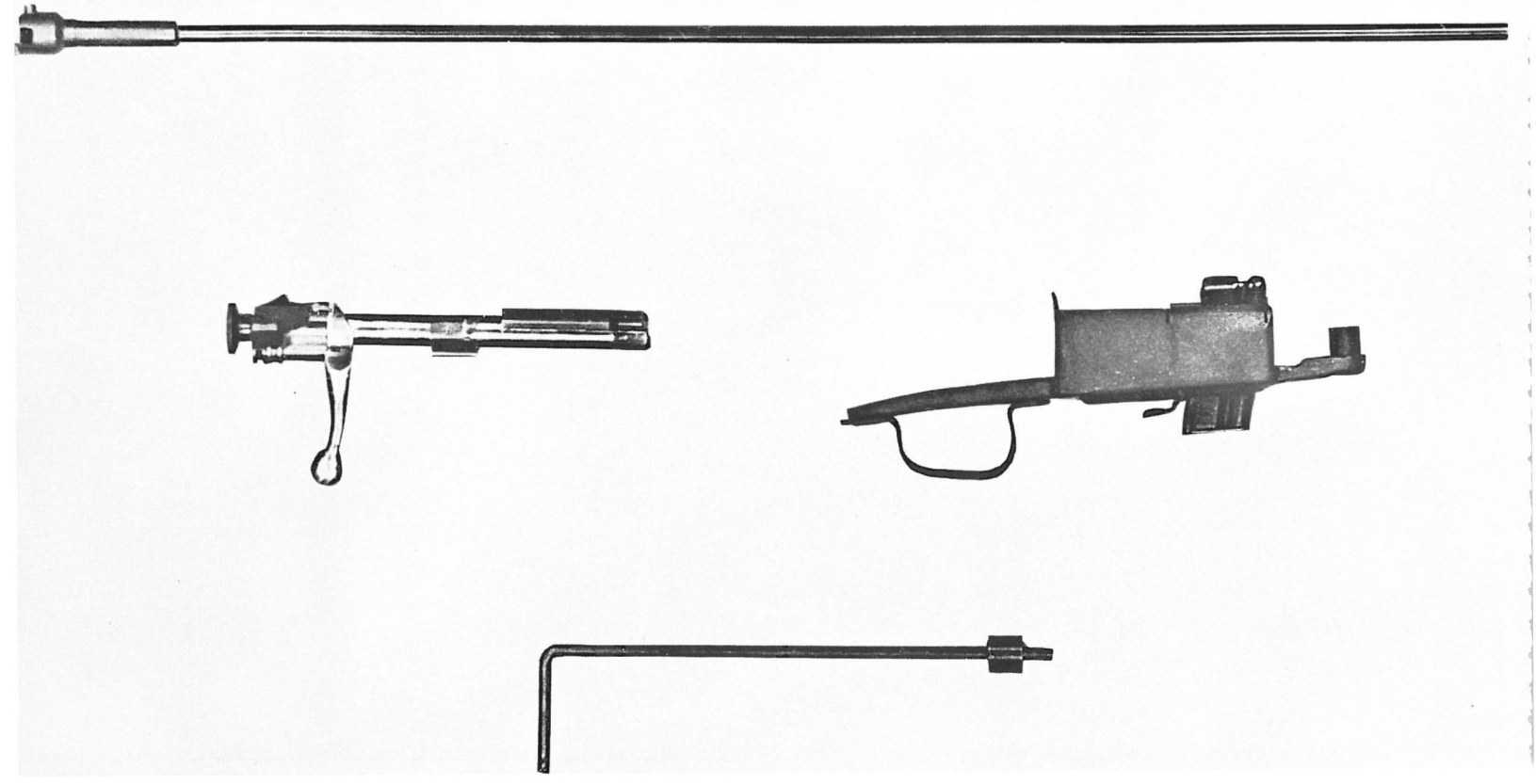
## IV

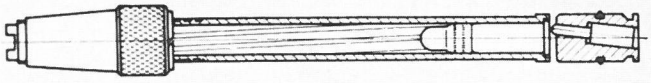
## *Auxiliary Cartridges and Cartridge Holders*

42. *Winchester Supplemental Chambers (figure 42)*

What became known as the Winchester Supplemental Chambers were patented on Aug. 22, 1899 and sold by the Supplemental Chamber Co. of

*Figure 30. Numrich M1903 Springfield .22 conversion unit*



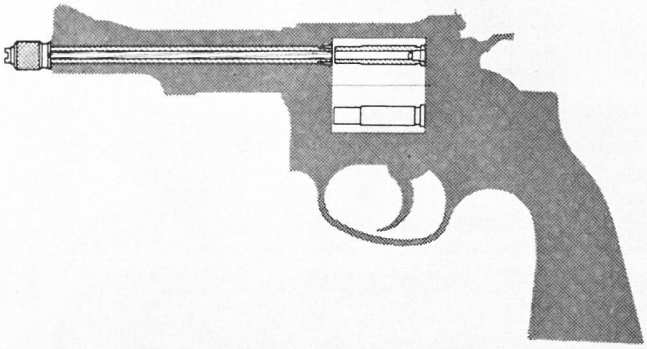


## Einstecklauf Kal. .22 l. r. Randfeuer DBGM

nur für **Pistolen** Kal. 9 mm Parabellum

| | | |
|---|---|---|
| komplett mit Zündstück | | DM 48.– |
| Zündstück | extra | DM 4.80 |

---



## Einstecklauf Kal. 4 mm M 20 Zentralfeuer

für alle **Revolver**
mit Ladepatronenzubehör

| | | |
|---|---|---|
| Kal. .32, .357 und .38 | komplett | DM 39.– |
| Ladepatrone | extra | DM 1.90 |
| Ausstoßer | extra | DM 0.90 |
| Wischstock | extra | DM 0.65 |

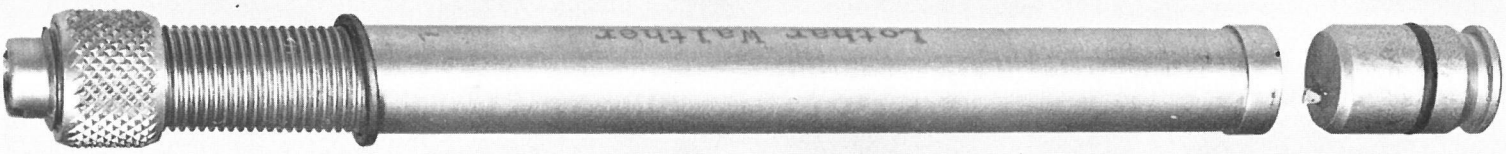
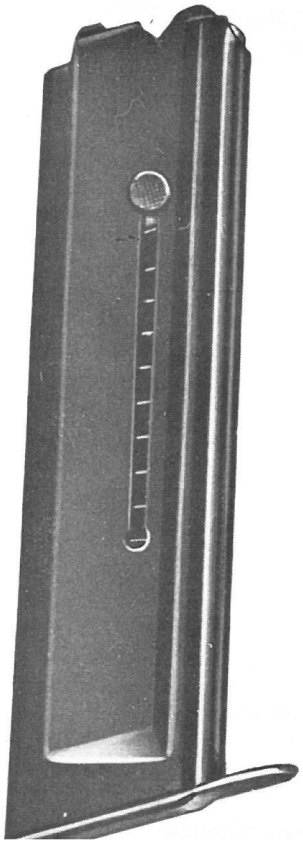
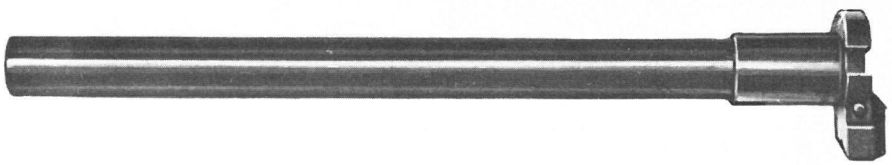



*Figure 31. Lothar Walther Insert Barrels*

*Figure 32. Walther P-38 Pistol Conversion Kit*



Roseburg, Oregon until October 1903 under the name of Gillette's Supplemental Chambers. During the latter months of 1903 they were distributed by the J. P. Lower firm of Denver, Colo. From that time until 1906 they were distributed by the Supplemental Chamber Co. which by then had moved to Drain, Oregon. From 1906 on, they became a Winchester product and were so marked and distributed. Certain types were available until 1950.

*Winchester Supplemental Chambers*

| For Use In | For Use With | Catalog Listing |
|---|---|---|
| .30-30 Winchester | .32 S&W | 1906–1950 |
| .30-40 Krag | .32 S&W | 1906–1950 |
| .30-'06 Gov't | .32 S&W | 1906–1950 |
| .303 British | .32 S&W | 1906–1950 |
| .303 Savage | .32 S&W | 1906–1950 |
| .32 Winchester Spec. | .32 Short or Long Colt | 1906–1950 |
| .32-40 Winchester | .32 Short or Long Colt | 1906–1950 |
| .35 Winchester | .38 S&W or .38 N.P. | 1906–1916 |
| .405 Winchester | .41 Short Col. D.A. | 1906–1925 |

43. *Austro-Hungarian 8x50R Short-Range Practice Cartridge (figure 43)*

In 1901, the Austro-Hungarian Army adopted a reloadable short-range practice cartridge for use in its Mannlicher Model 1895 service rifle. Made by the Hirtenberg ammunition firm, this brass-cased 8 mm. cartridge device was designed for use with a blank center-fire cartridge containing a small charge of propellant powder. This cartridge was pressed into the base of the device after which a round-nose lead lubricated bullet was pressed over its mouth and secured in place by crimping with special pliers.

44. *Trask's Reloading Miniature Ammunition (figure 44)*

Introduced in England during the early 1900's, the Trask device was a steel cartridge case body that could be reloaded using a crimped center-fire blank cartridge inserted in the case head. Seating of a lead bullet in the case mouth completed the reloading operation.

Trask Patent ammunition was sold by the Reloading Miniature Ammunition Co., of London, England. The version illustrated here is in cal. .303 British.

45. *Marble Auxiliary Cartridges*

Patented in 1905 by James T. Brayton of Chicago, Ill., these cartridge holders were first known as Brayton Auxiliary Cartridges. By 1911 they were known as Marble-Brayton Auxiliary Cartridges, and after 1915 as Marbles Auxiliary Cartridges. The Marble firm of Gladstone, Mich. was organized in 1898 as the Marble's Safety Axe Co., but became the Marble Arms & Manufacturing Co. on April 1, 1911. These auxiliary cartridges are now obsolete. The following is a reasonably complete listing:

No. 150 — .30 Remington for use with .32 Short Colt
No. 151 — .30-30 Winchester for use with .32 Short Colt
No. 152 — .25-35 Winchester for use with .25 ACP
No. 152* — .25-36 Marlin for use with .25 ACP
No. 153 — .303 Savage for use with .32 S&W
No. 154 — .303 Savage for use with .32 ACP
No. 155 — .30-40 for use with .32 S&W
No. 155* — .303 British for use with .32 S&W
No. 156 — .30-40 for use with .32 Colt New Police
No. 157 — .30-40 for use with .32 ACP
No. 158 — .32 Winchester for use with .32 ACP
No. 159 — .30-'06 Gov't for use with .32 ACP
No. 159A — .30-'03 Gov't for use with .32 ACP
No. 161 — .22 Savage Hi-Power for use with .22 long rifle
No. 162 — .30-'03 and .30-'06 Gov't for use with .32 S&W
No. 163 — .25 Remington for use with .25 ACP
No. 164 — .32 Remington for use with .32 S&W
No. 165 — .303 British for use with .32 S&W
No. 166 — .303 British for use with .32 ACP
No. 167 — .35 Remington for use with .380 ACP
No. 168 — .35 Winchester M1895 for use with .380 ACP
No. 169 — 8 mm. Mauser for use with .32 ACP
No. 169A — 9 mm. Mauser for use with .35 S&W Automatic
No. 170 — .250 Savage for use with .25 ACP
No. 171 — .250 Savage for use with .25 Stevens Rimfire
No. 172 — .300 Savage for use with .32 ACP
No. 173 — 6.5 mm. Mannlicher-Schoenauer for use with .25 ACP
No. 174 — .220 Swift for use with .22 long rifle

46. *Cartridge Holder for Use with the U.S. Model 1903 Gallery Practice Rifle (figure 46)*

Introduced into the U.S. service in 1907, the Model 1903 Gallery Practice rifle was a modified version of the standard Model 1903 cal. .30 service rifle. It was fitted with a cal. .22 barrel. A special steel cartridge holder, called the Hoffer-Thompson adapter after its designers was used with this rifle. This smoothbore adapter shown disassembled here contained a spring-backed striker with dual firing pins. It utilized the .22 short rimfire cartridge which had to be loaded into the holder by hand.

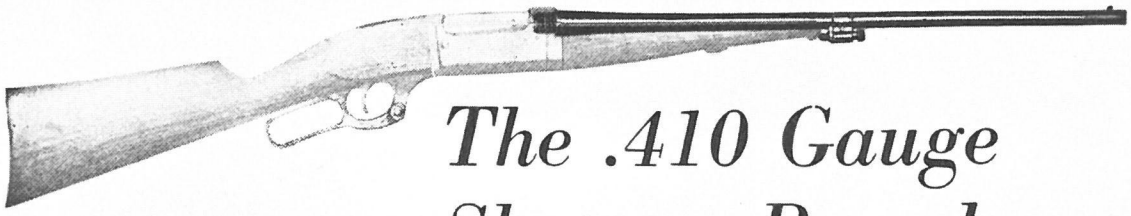
46-A. Five Hoffer-Thompson cartridge holders containing as many .22 short cartridges could be placed in a standard M1903 cartridge clip to facilitate charging the magazine of the Gallery Practice rifle.

47. *Mayer's Duck Raiser (figure 47)*

Made for use in one barrel of a double-barrel shotgun, this adapter was patented in the United States in 1916 by Henry K. Mayer. It was chambered for the .32 S&W cartridge and was normally used with a blank cartridge to frighten ducks and cause them to rise from the water and thus provide better targets for the shot swarm from the other barrel. A ball cartridge can be fired from this device, but accuracy would be poor as it is not rifled.

48. *National Arms Company High Pressure Zip Chambers (figure 48)*

Introduced in 1932 and sold until about 1939 by the National Arms Co. of San Francisco, Calif.,



# The .410 Gauge Shotgun Barrel for Model 99 Take-down Rifles

## SPECIFICATIONS

*.410 gauge, full choke, single shot. Made in weights and lengths as follows:*

FEATHERWEIGHT. Adapted to Model 99-F and Model 99-G. Length 22″ and 24″. Weight, 1½ pounds.

STANDARD WEIGHT. Adapted to Model 99-B and Model 99-D. Length, 26″. Weight, 2½ pounds.

*When ordering specify Model letter and caliber of rifle.*

The owner of a Savage Model 99 Take-down rifle can double the use of his rifle with this auxiliary .410 gauge barrel. Take down the Model 99 Savage Hi-Power rifle; screw the .410 barrel in the receiver; replace the fore-end; tighten the screw — and the rifle has been changed to a hard hitting, even throwing .410 gauge shotgun.

The barrel is made of Savage "Hi-Pressure" steel, is carefully choke bored, and will give patterns sufficient to account for small game and vermin birds and animals up to twenty-five yards.

To load; open action with finger lever — drop the .410 gauge shot shell in chamber of barrel and close action; after firing, the empty shell is extracted and ejected by opening action and another loaded shell can be dropped in barrel chamber.

The utility of the auxiliary .410 barrel will appeal to the sportsman on big game hunting trips for shooting small game, and in closed game season for practice in handling the arm while shooting vermin birds and animals.

## .300 SAVAGE COMBINATION KIT

At the request of many sportsmen purchasing a Model 99 take-down rifle and .410 Gauge auxiliary barrel, a complete unit is offered as follows:

A Model 99-G take-down rifle chambered for the .300 Savage cartridge and a .410 Gauge auxiliary barrel are sold in a handsome case. The case is made of basswood veneer, covered with a high-grade black fabrikoid and nickel trimmed. The interior is plush lined. This case is not supplied for any other style or caliber of rifle.

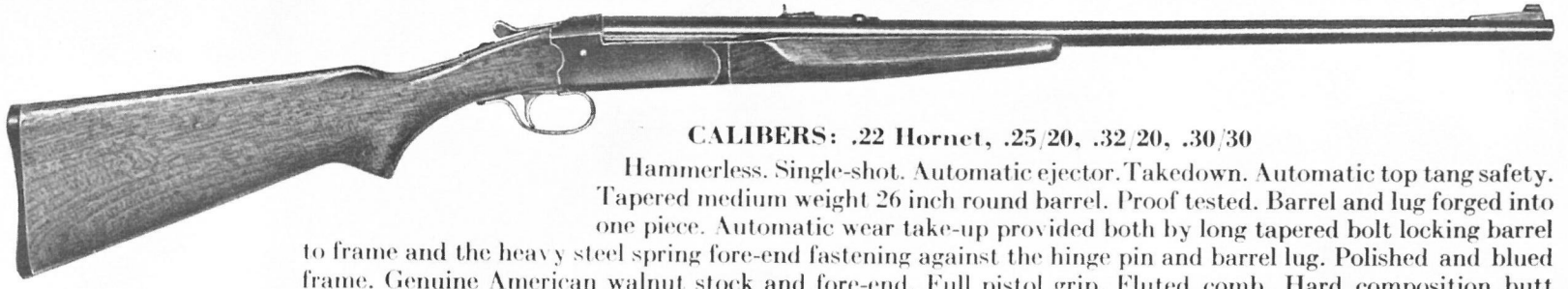
25

*Figure 33. Savage Model 99 Auxiliary .410-bore barrel.*

# SAVAGE SINGLE SHOT HI-POWER RIFLES

## ★ MODEL 219

Here are high and medium power rifles made in accordance with the high standards of Savage Quality. True balance, selected material and fine workmanship make the Model 219 an unusual arm at a modest price.

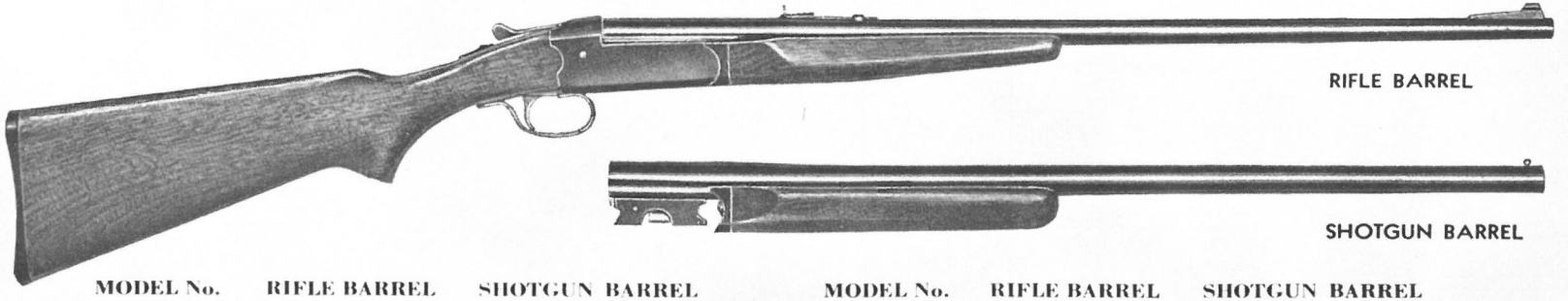


**CALIBERS: .22 Hornet, .25/20, .32/20, .30/30**

Hammerless. Single-shot. Automatic ejector. Takedown. Automatic top tang safety. Tapered medium weight 26 inch round barrel. Proof tested. Barrel and lug forged into one piece. Automatic wear take-up provided both by long tapered bolt locking barrel to frame and the heavy steel spring fore-end fastening against the hinge pin and barrel lug. Polished and blued frame. Genuine American walnut stock and fore-end. Full pistol grip. Fluted comb. Hard composition butt plate. Adjustable semi-buckhorn rear sight. Gold bead front sight on raised ramp base. Weight about 6¼ lbs.

## ★ SAVAGE UTILITY GUN

Here is the most economical way to own a fine high power rifle and a shotgun. The Savage Utility Gun consists of a stock and single shot action and a choice of a combination of interchangeable rifle and shotgun proof tested barrels. With either you have a light, trim, fast handling arm with the shooting qualities of guns costing many times as much.




| MODEL No. | RIFLE BARREL CALIBER | SHOTGUN BARREL GAUGE | SHOTGUN BARREL LENGTH | MODEL No. | RIFLE BARREL CALIBER | SHOTGUN BARREL GAUGE | SHOTGUN BARREL LENGTH |
|---|---|---|---|---|---|---|---|
| **221** | .30/30 | 12 | 30″ | **227** | .22 Hornet | 12 | 30″ |
| **222** | .30/30 | 16 | 28″ | **228** | .22 Hornet | 16 | 28″ |
| **223** | .30/30 | 20 | 28″ | **229** | .22 Hornet | 20 | 28″ |
| **224** | .25/20 | 12 | 30″ | **230** | .32/20 | 12 | 30″ |
| **225** | .25/20 | 16 | 28″ | **231** | .32/20 | 16 | 28″ |
| **226** | .25/20 | 20 | 28″ | | | | |



*Figure 34. Savage Utility Gun*

*Figure 35. Fiala Magazine Pistol*

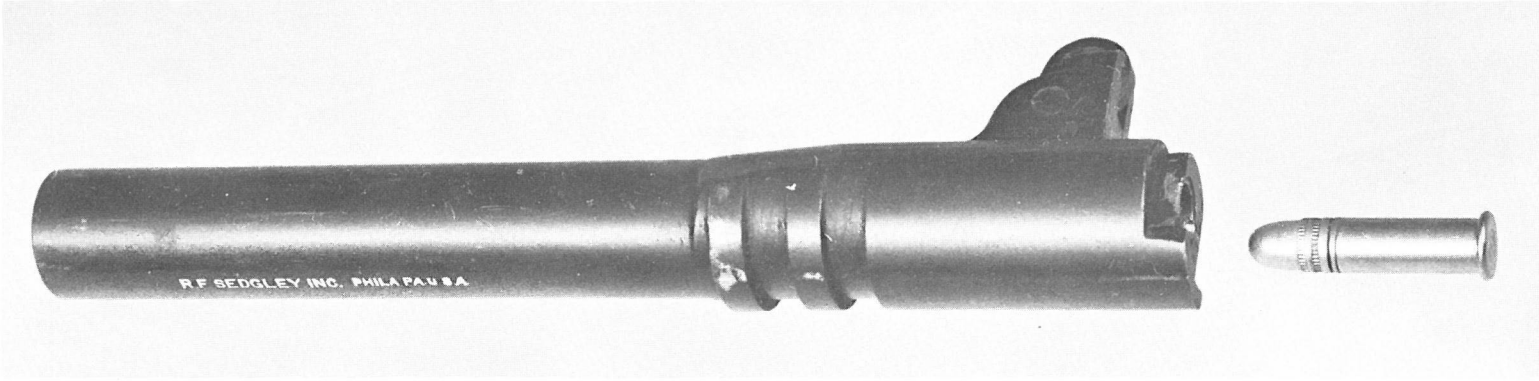



*Figure 36. Sedgley .45-.22 Sub Caliber Barrel — late type.*

*Figure 37. Walther PP 7.65 mm with 4 mm conversion barrel*


*Figure 38. Walther 7.65 mm adaptor for 4 mm.*

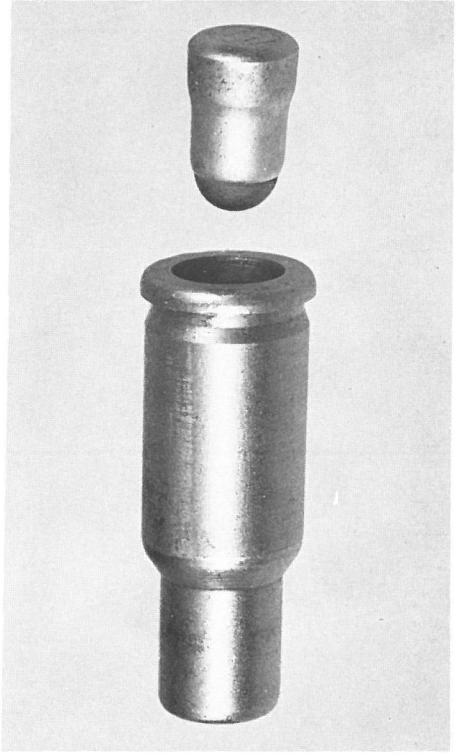
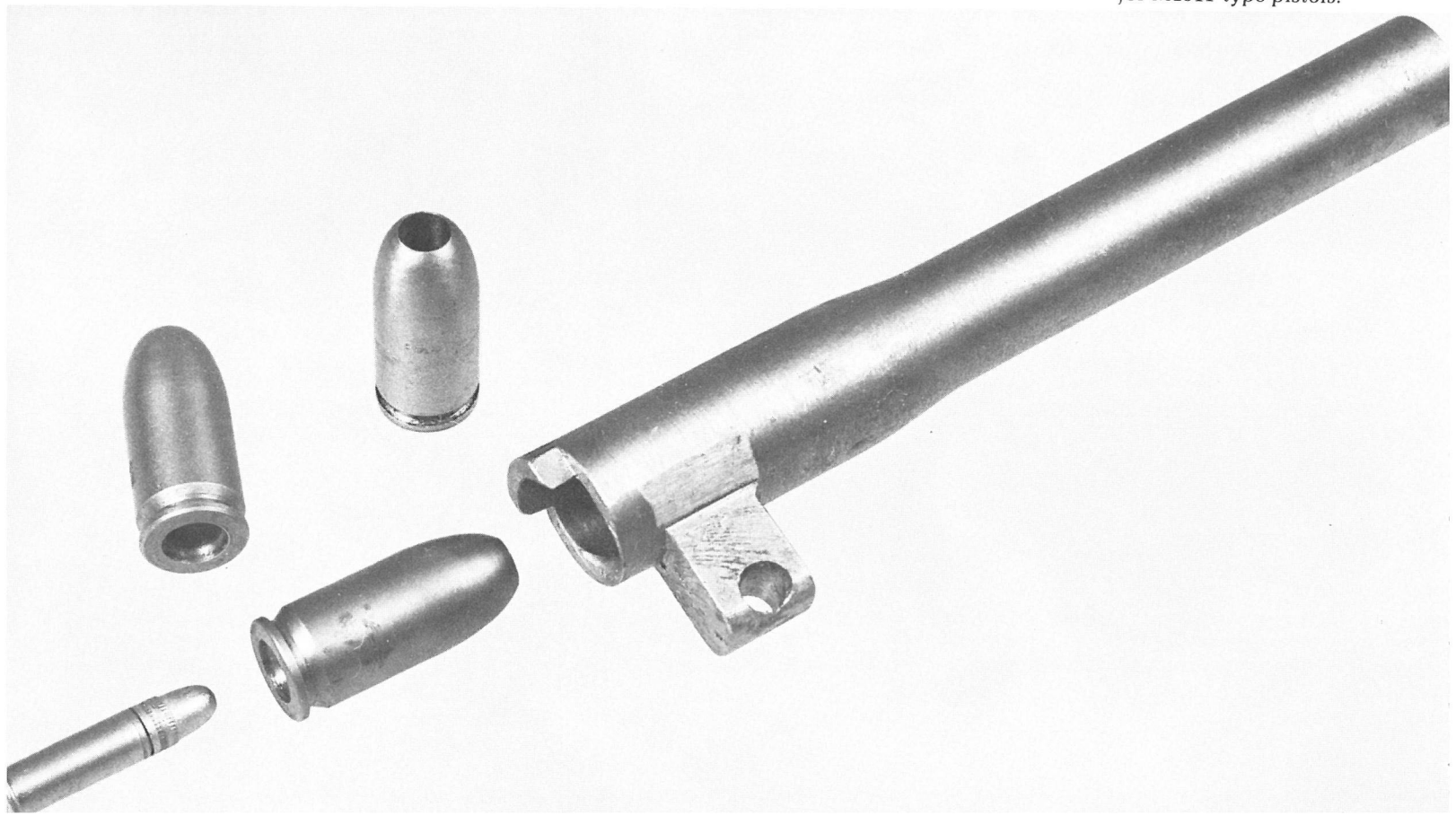


*Figure 39. F. I. combination rifle-pistol*

*Figure 40. Norwegian .22/.45 sub-caliber barrel assembly for M1911-type pistols.*



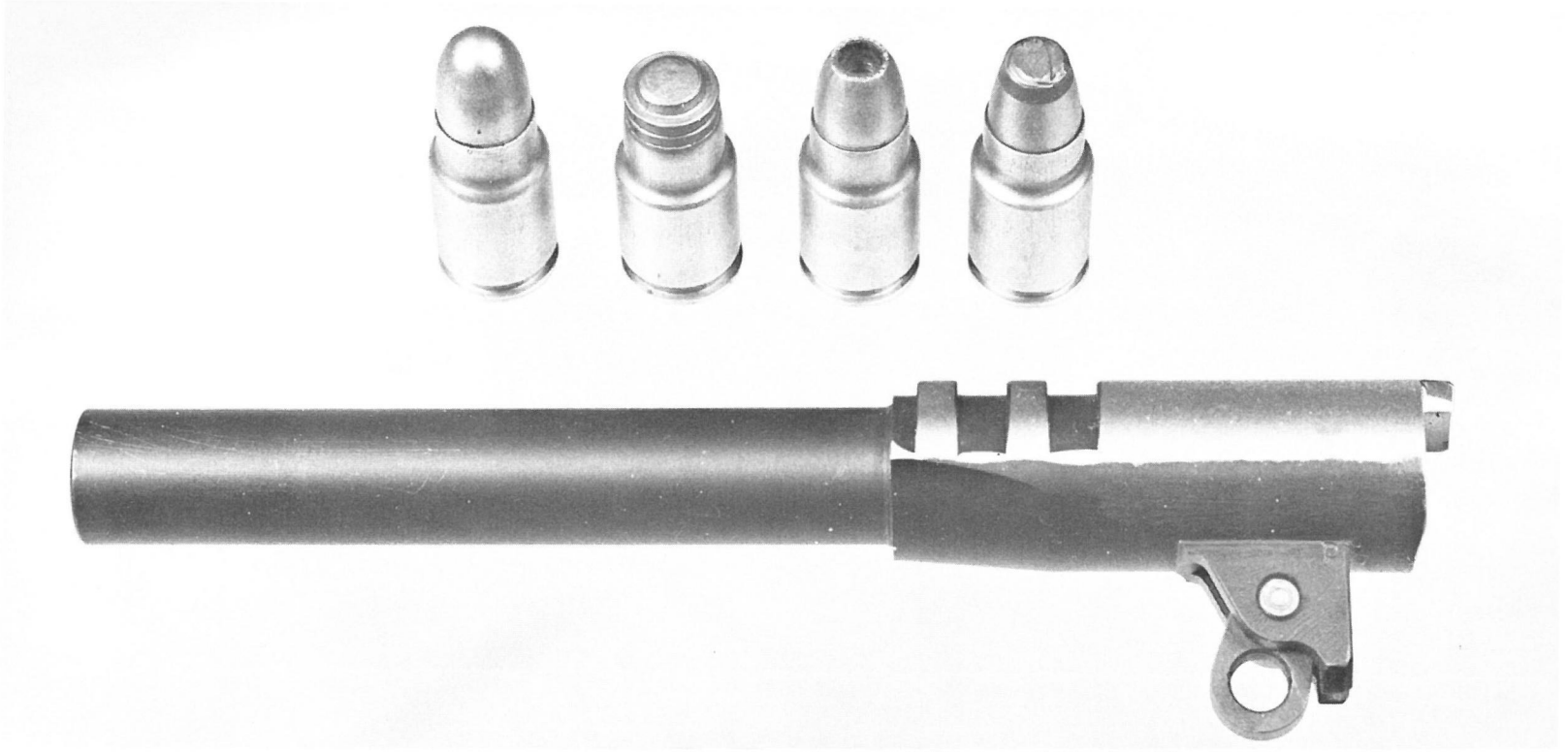


*Figure 41. Whitney .38/.45 sub-caliber barrel*

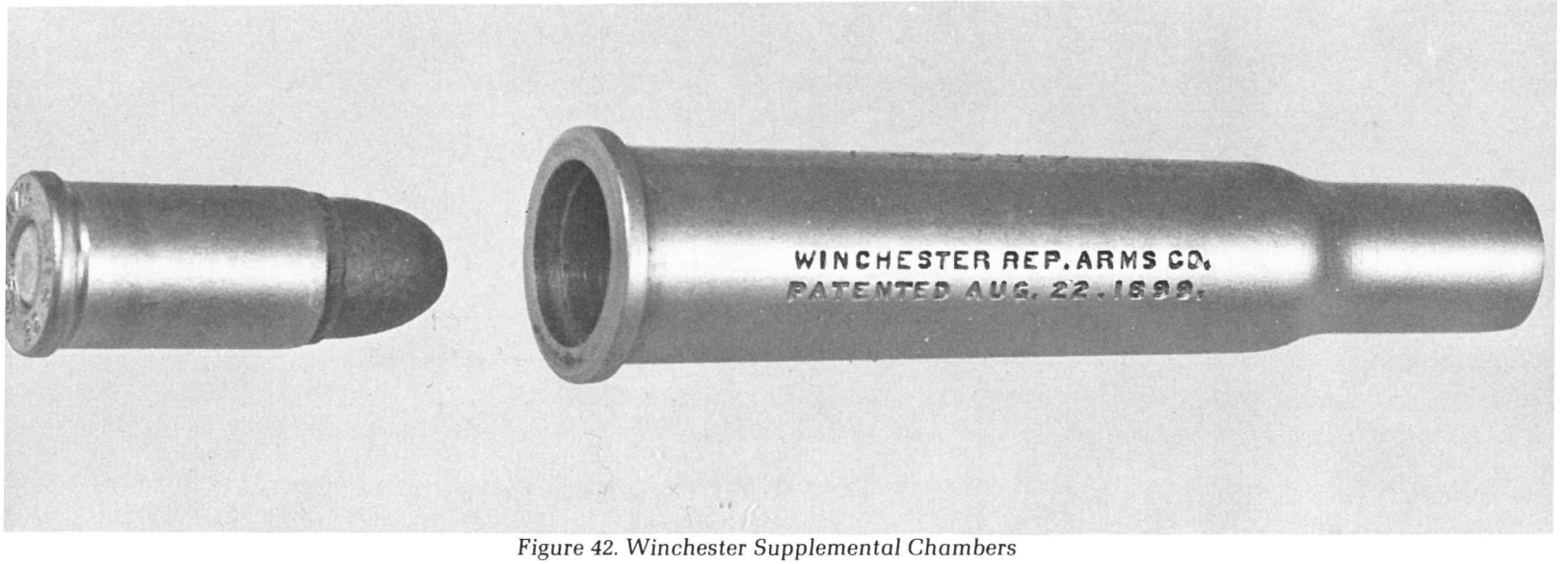



*Figure 42. Winchester Supplemental Chambers*

the steel Zip Chambers utilized special Remington Kleanbore .22 WRF blank cartridges which were made in both straight-case and bottle-neck case types. Both cupro-nickel jacketed and plain lead alloy bullets were available. The Zip chamber contained an auxiliary firing pin.

Zip chambers were made in the following styles:

| | |
|---|---|
| .250 Savage | .300 Savage |
| .270 Winchester | .303 Savage |
| .30-30 Winchester | .32 Winchester Special |
| .30-40 Krag | 6.5 mm. Mann.-Schoenauer |
| .30-'06 Gov't | 7 mm. Mauser |
| 8 mm. Mauser | |

49. *Lothar Walther Auxiliary Cartridges (figure 49)*

The Lothar Walther Auxiliary Cartridges are made in Koenigsbronn, West Germany. Machined from steel, they are similar in principle to the Winchester and Marble's auxiliary cartridges and supplementary chambers. Some are little more than simple sleeves to hold the cartridge whereas others have an auxiliary firing pin. They are made to service an extensive variety of European and American center-fire rifle calibers. Typical examples permit firing the .30 carbine cartridge in rifles chambered for the .308 Winchester and .30-40 Krag cartridges, or the .22 long rifle rimfire round in a .222 Remington Magnum rifle.

Similar auxiliary cartridges machined from brass are also made in this country.

50. *Econ-O-Shot Shotgun Adapter (figure 50)*

Introduced in 1948 by P. S. Industries of Wellington, Ohio, this smoothbore adapter was made of blued steel and was chambered for the .22 long rifle shot cartridge. It was available in 12-, 16- and 20-ga. sizes and was so designed that several could be loaded at one time into the magazine of a

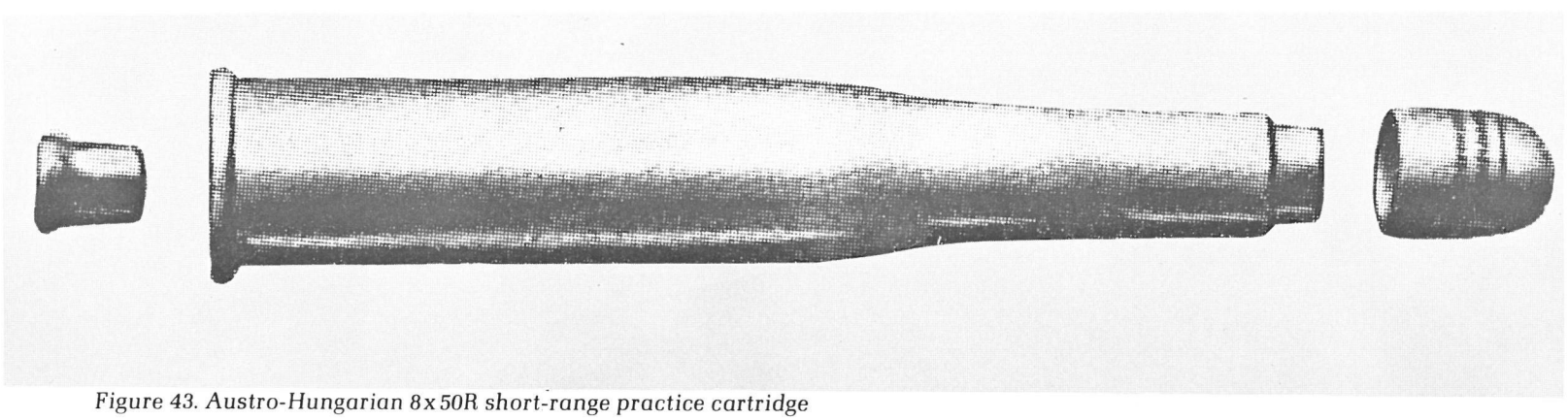


*Figure 43. Austro-Hungarian 8x50R short-range practice cartridge*

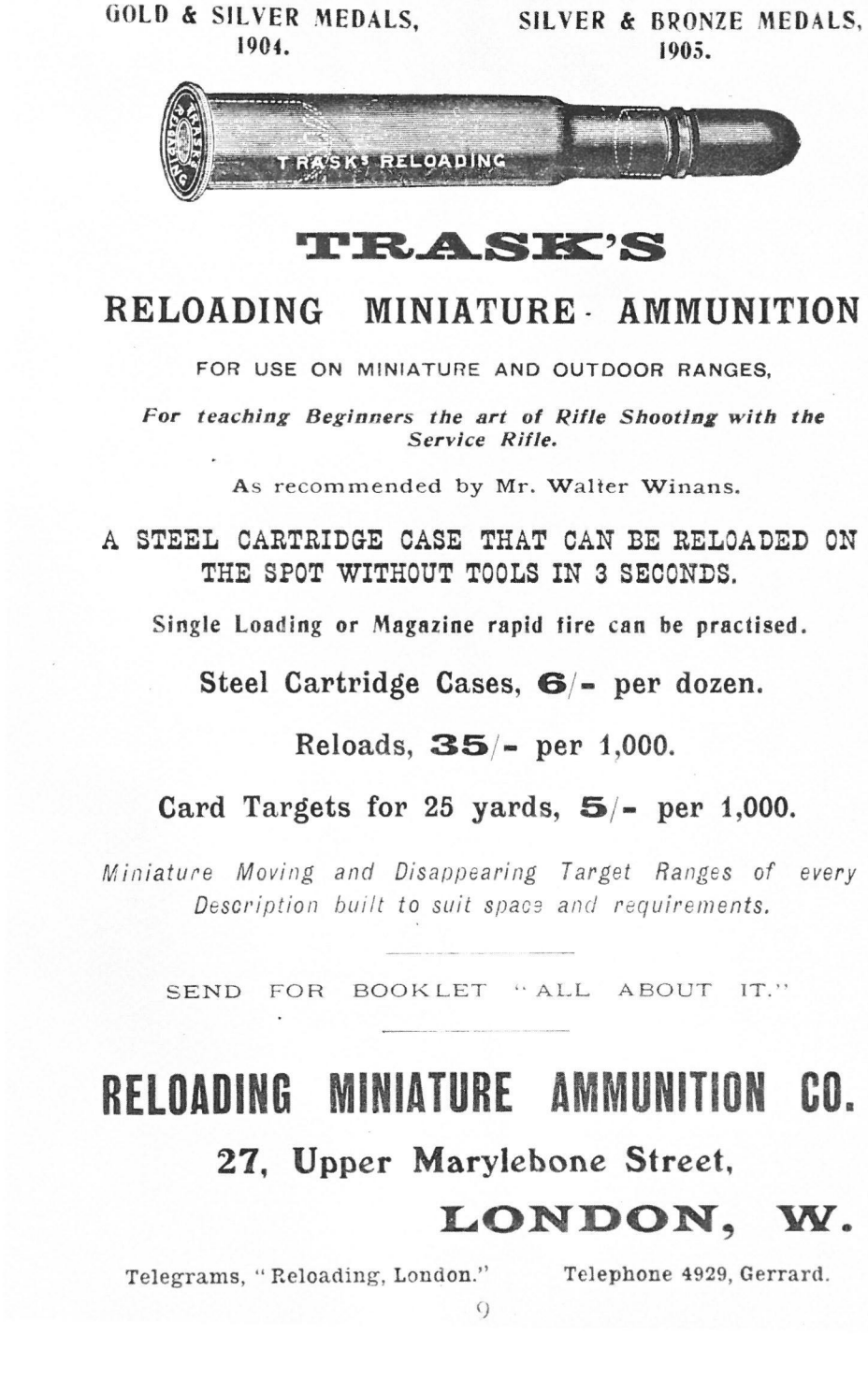



*Figure 44. Trask's Reloading Miniature Ammunition*

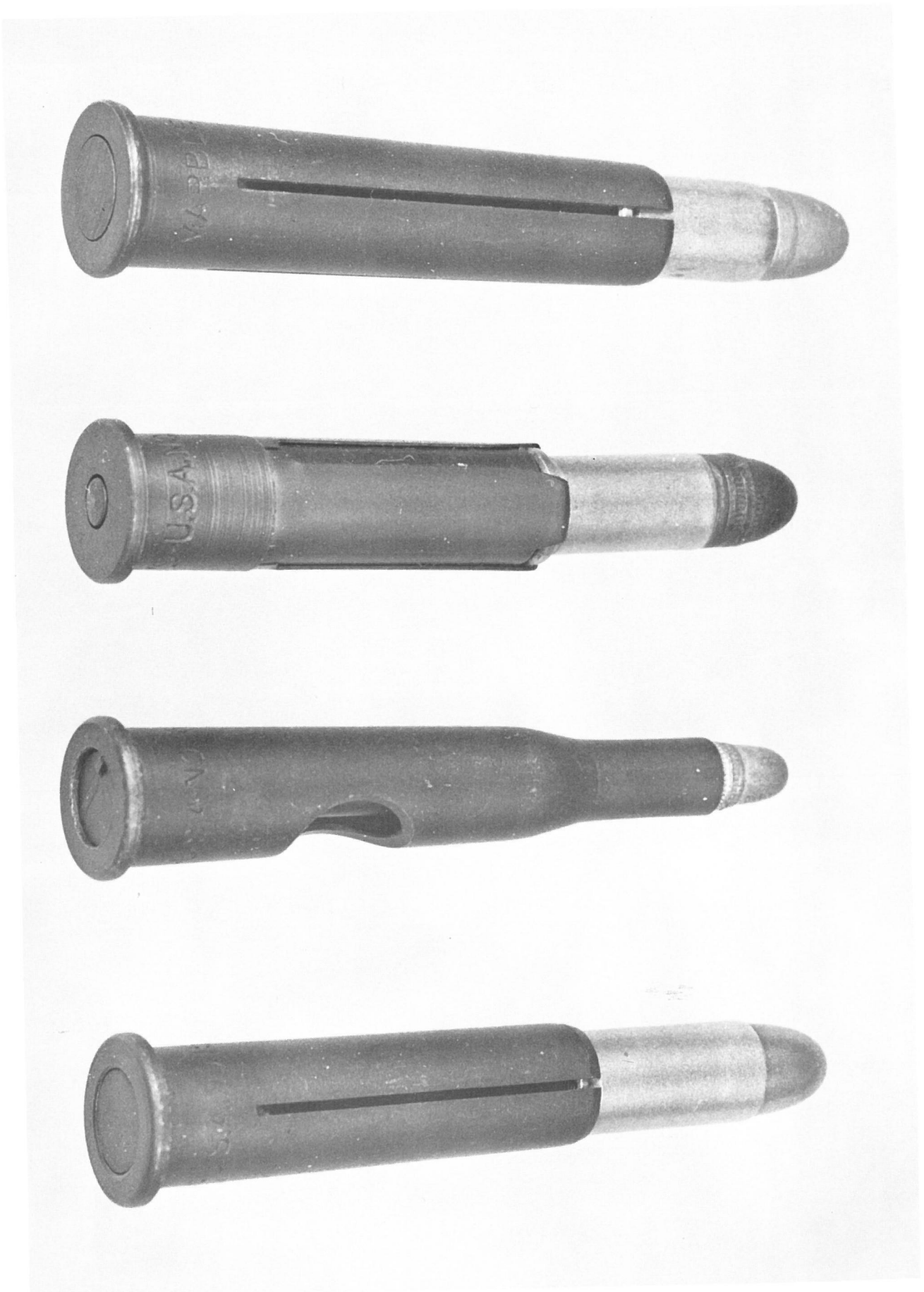


*Figure 45. Marble Auxiliary Cartridges*

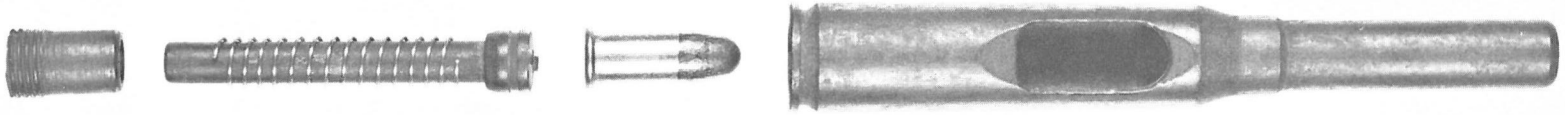
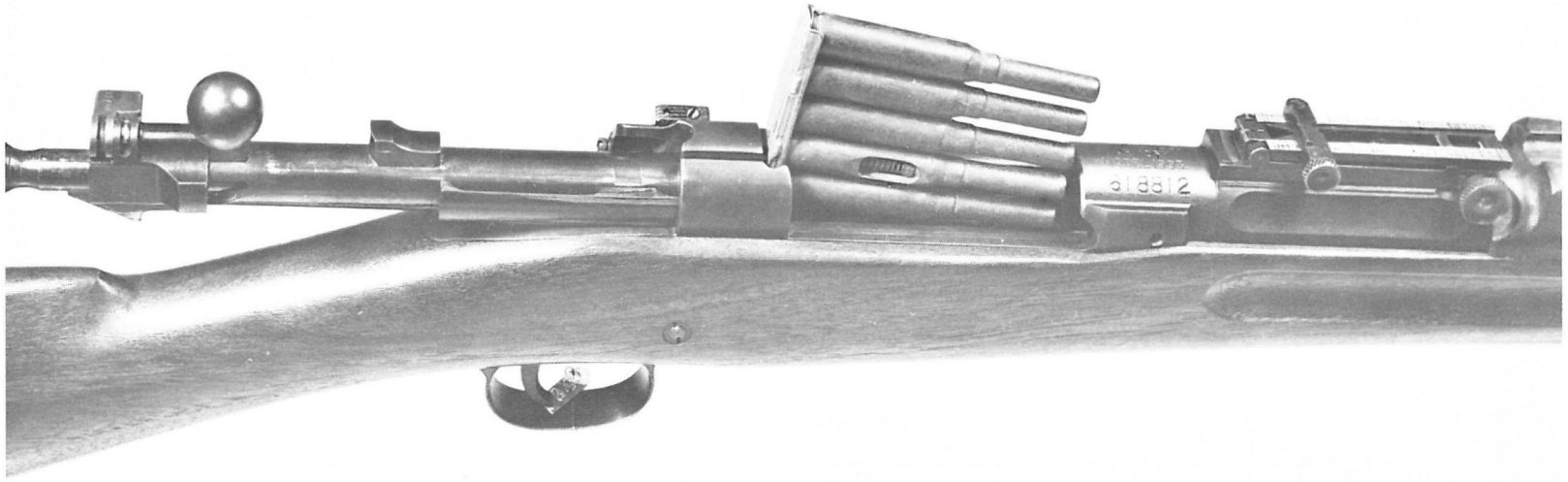


*Figure 46. Cartridge holder for U. S. M1903 Gallery Practice Rifle*



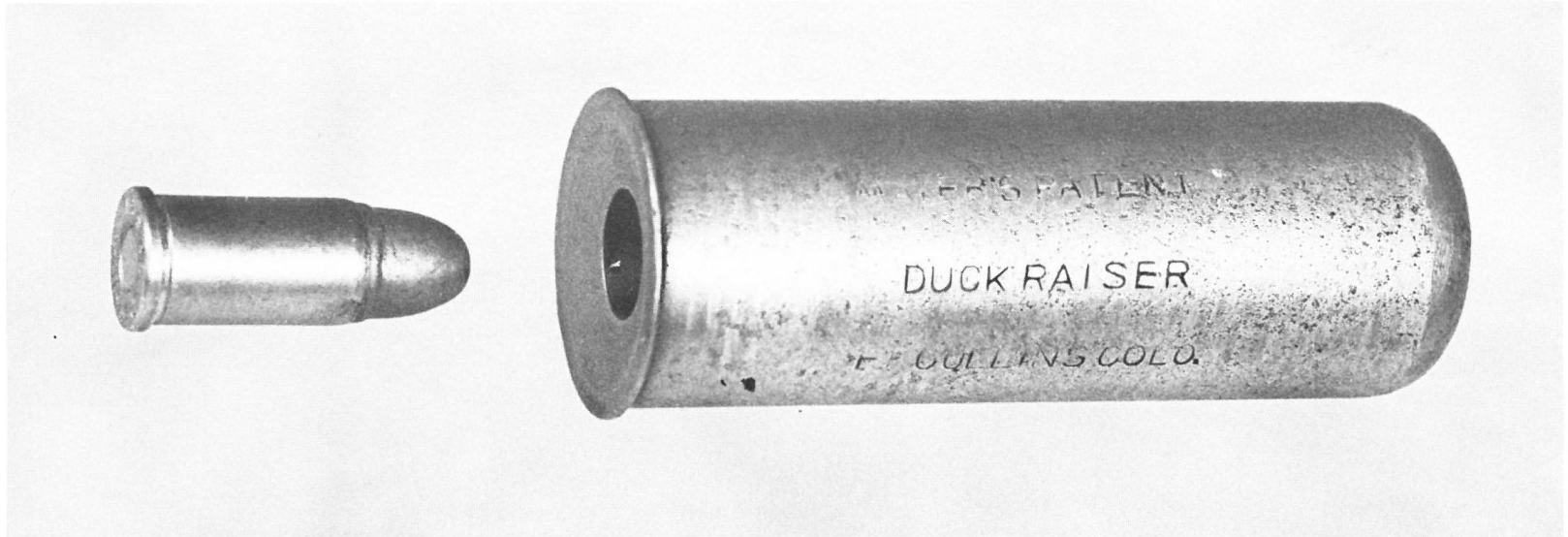



*Figure 47. Mayer's Duck Raiser*

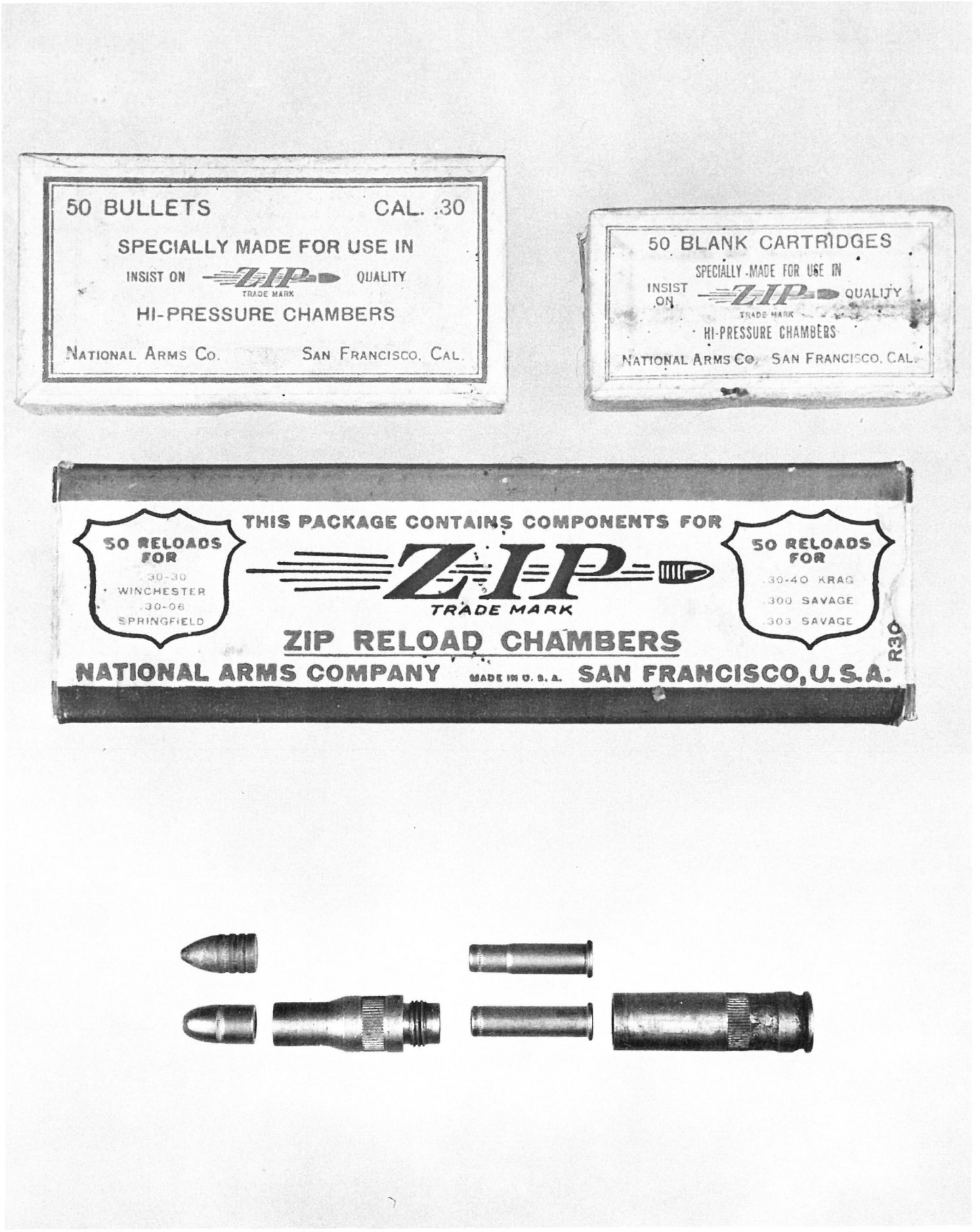



*Figure 48. National Arms Company High Pressure Zip Chambers*

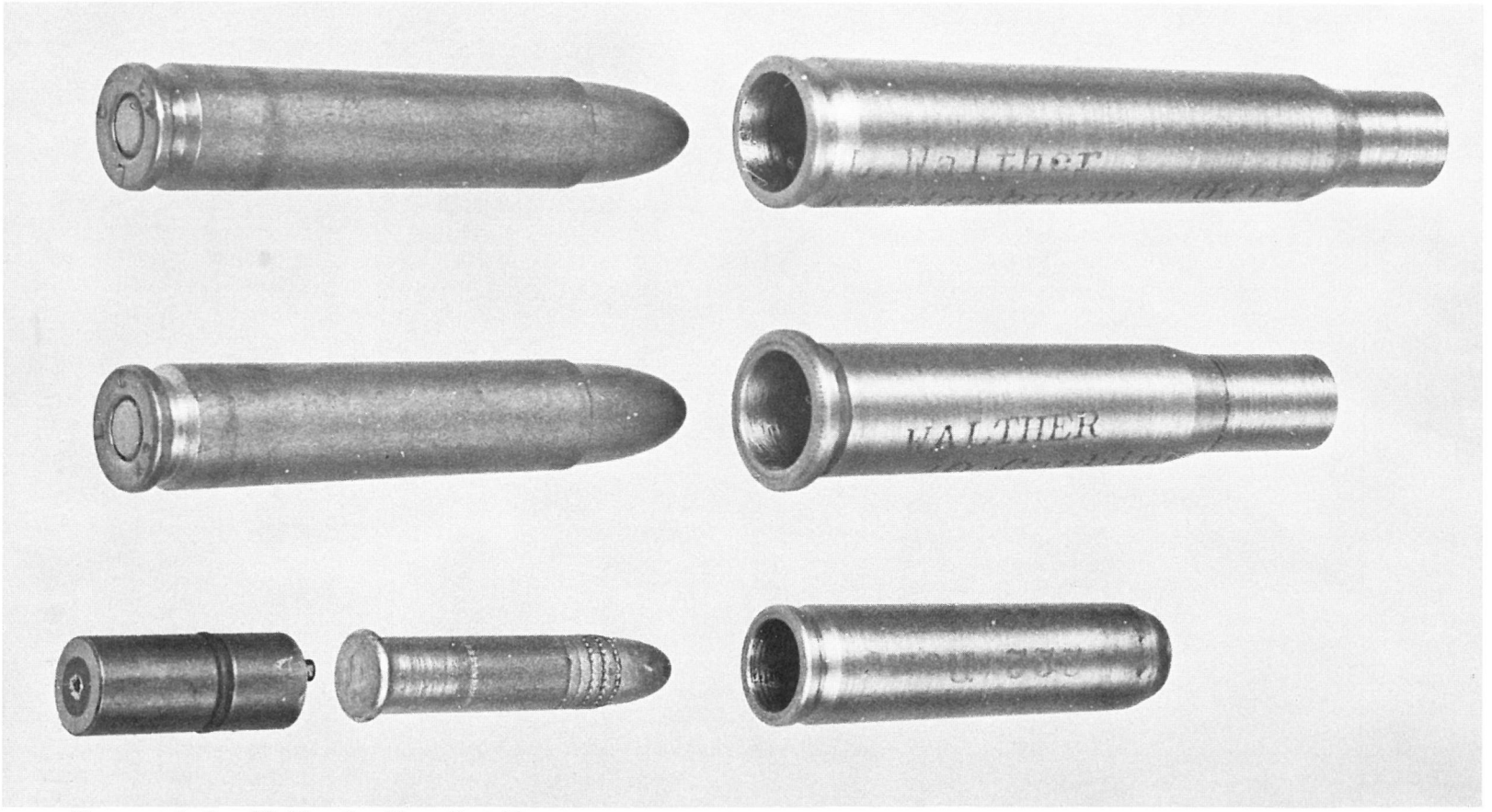
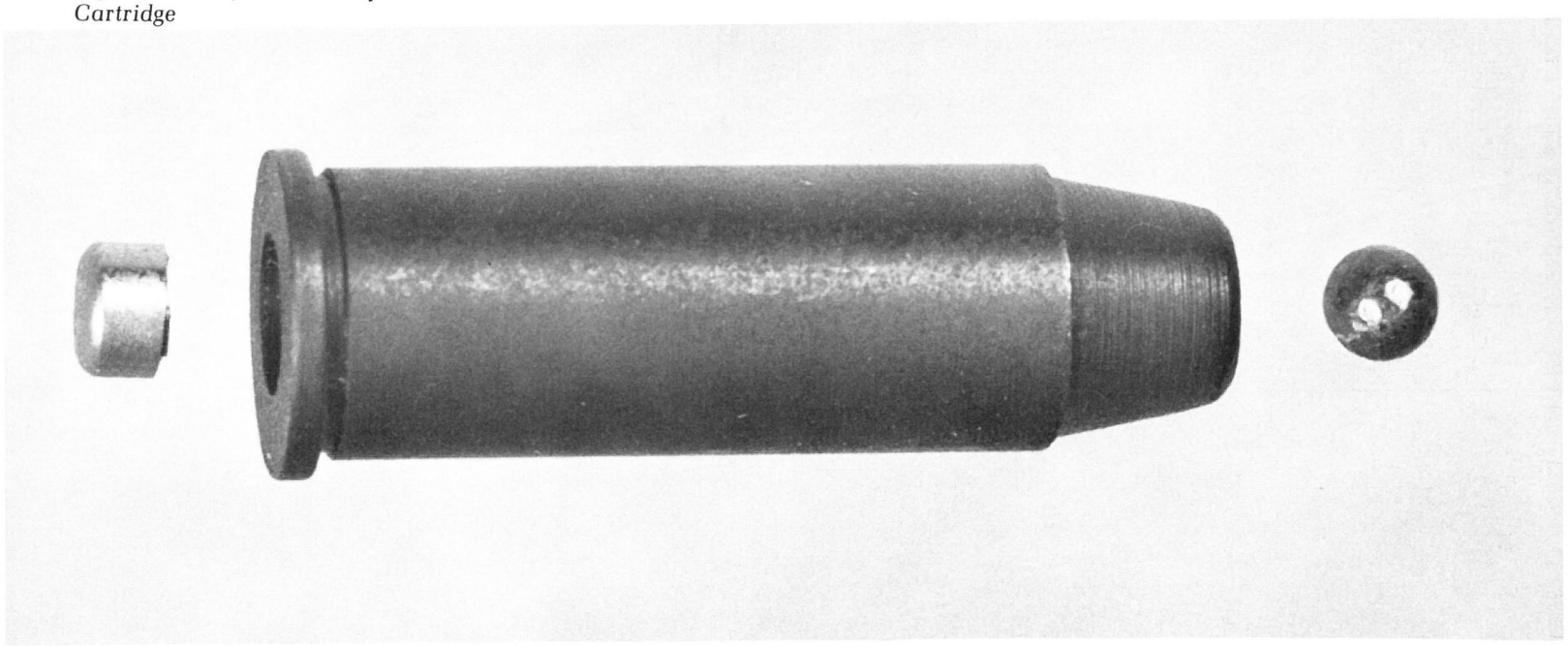



*Figure 49. Lothar Walther Auxiliary Cartridges*


*Figure 50. Econ-O-Shot Shotgun Adaptor*

*Figure 51. Smith & Wesson Model 53 Revolver*

*Figure 52. Tri-Jen Auxiliary Cartridge*



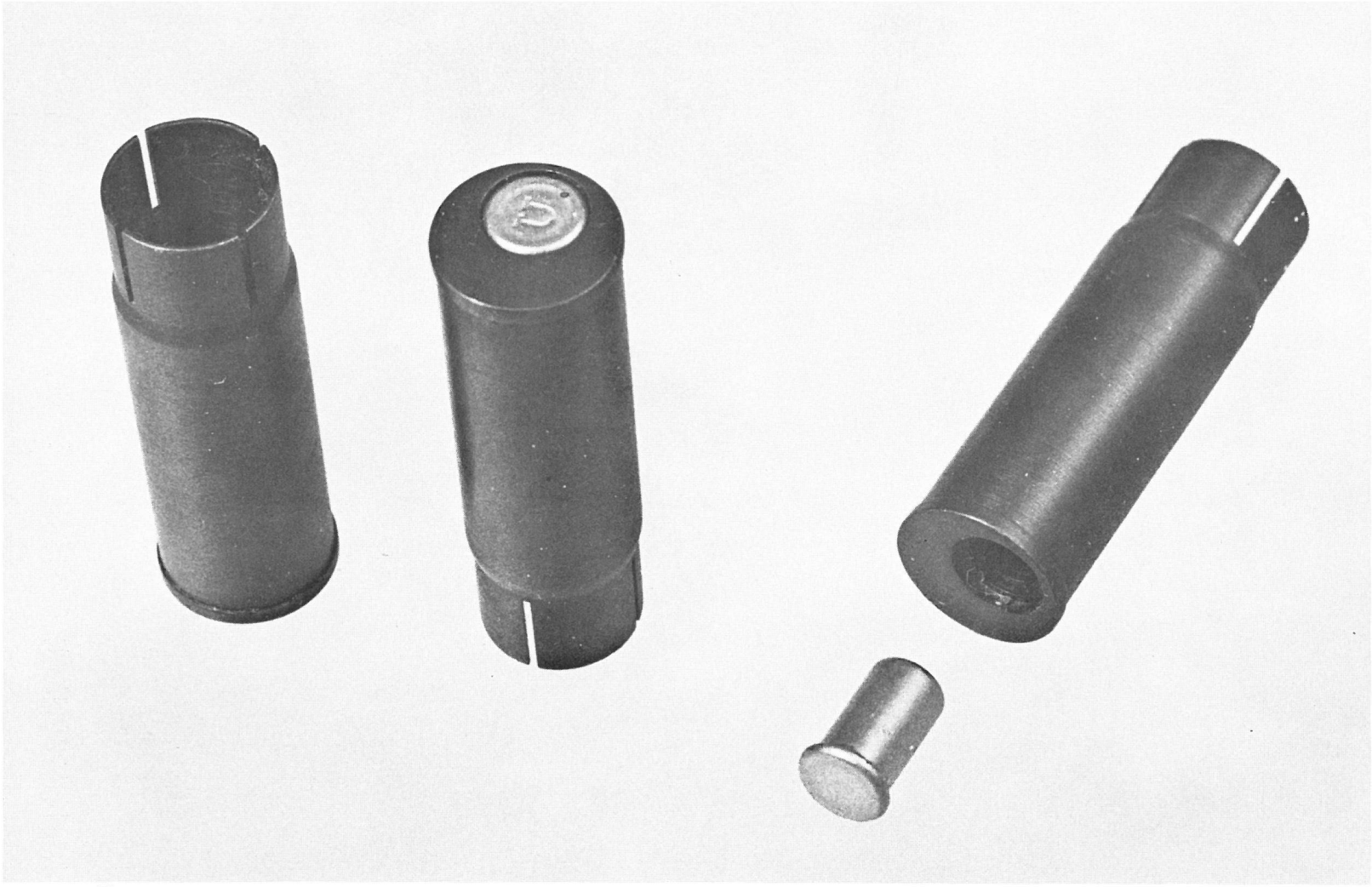


*Figure 53. Pointer Fast-Draw Adaptor*

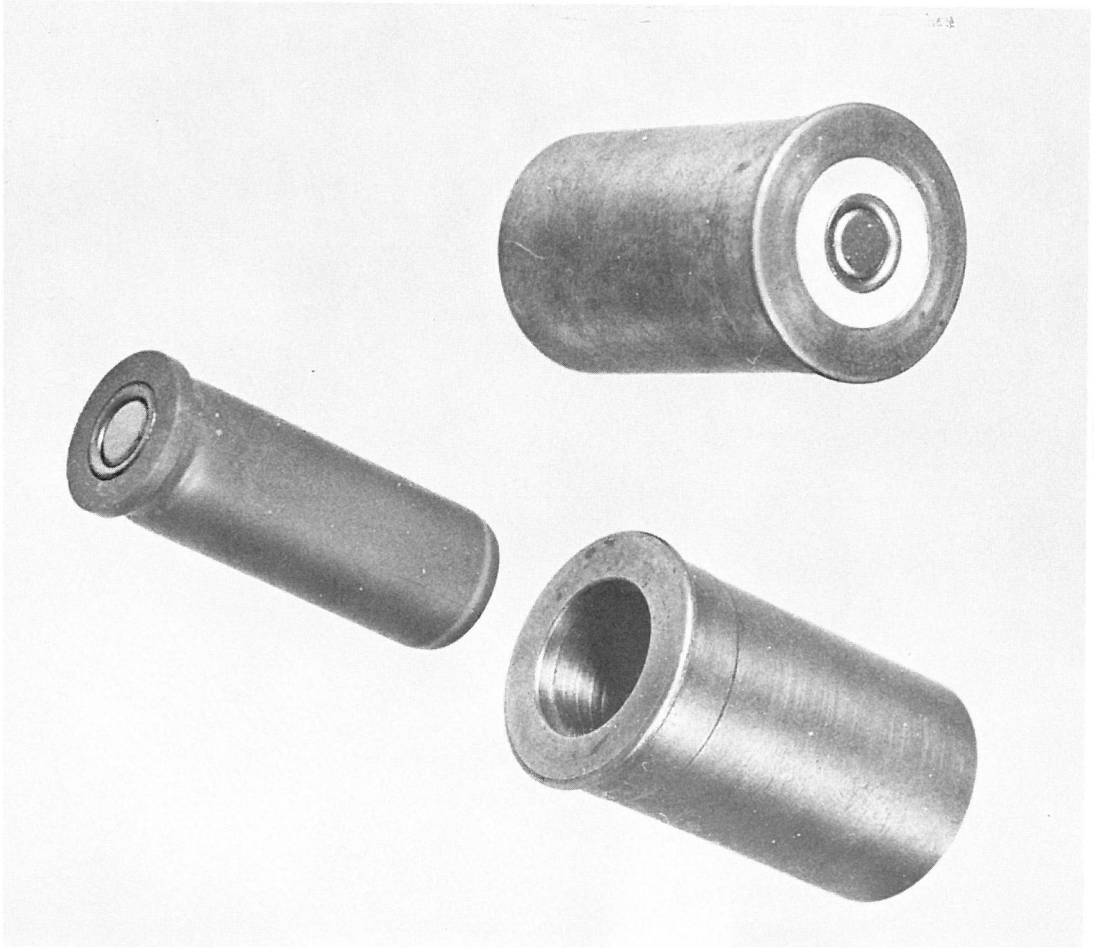


*Figure 54. Alcan Shotgun Adaptor for .45 Colt Blank Cartridge*

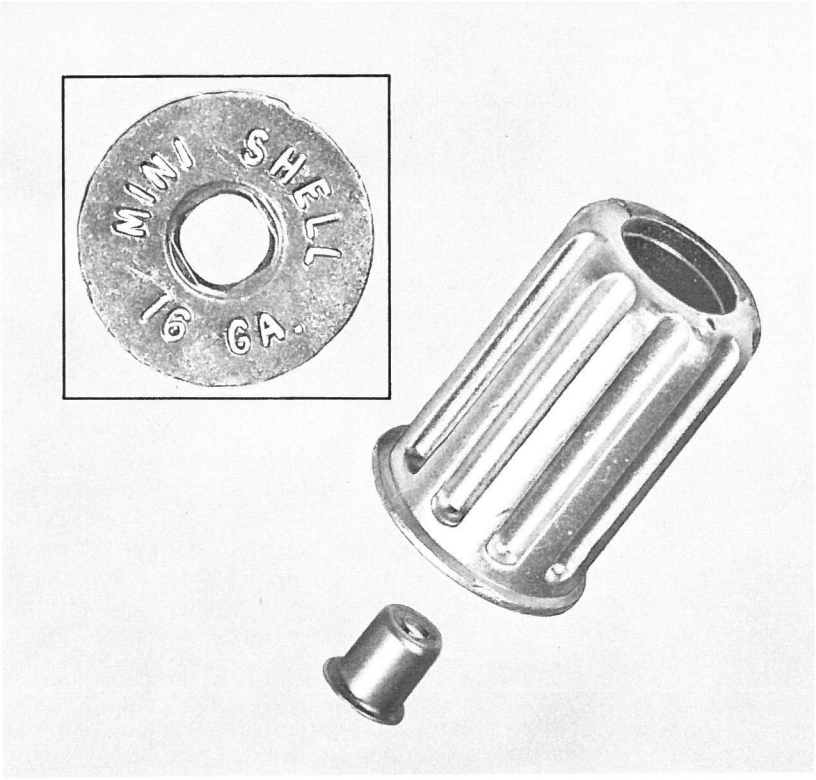



*Figure 55. Sport Ammo Mini Shell*

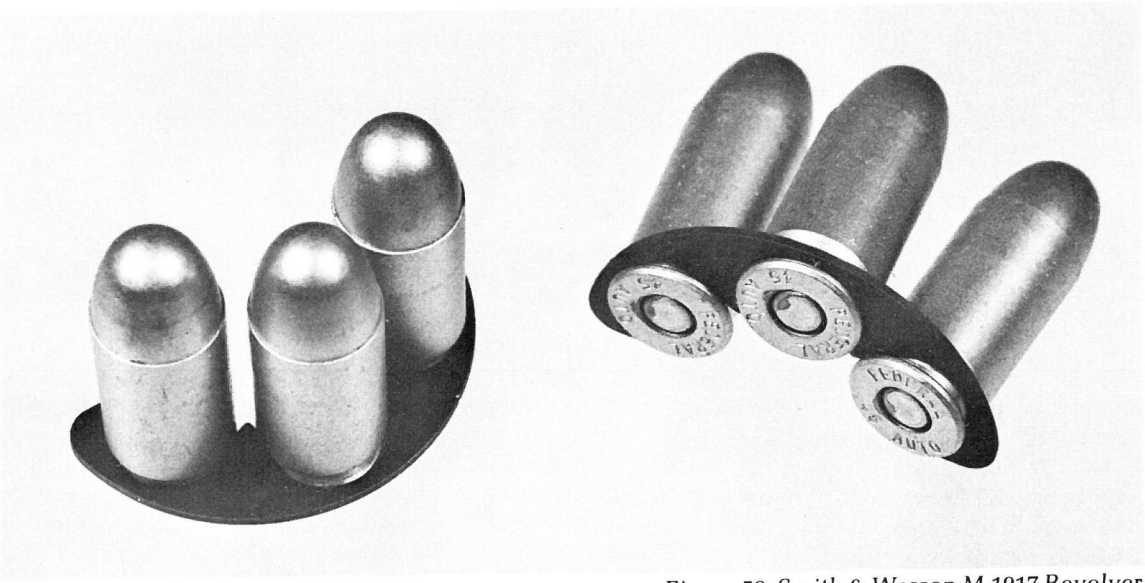


*Figure 56. Smith & Wesson M 1917 Revolver Three-Shot Clip*

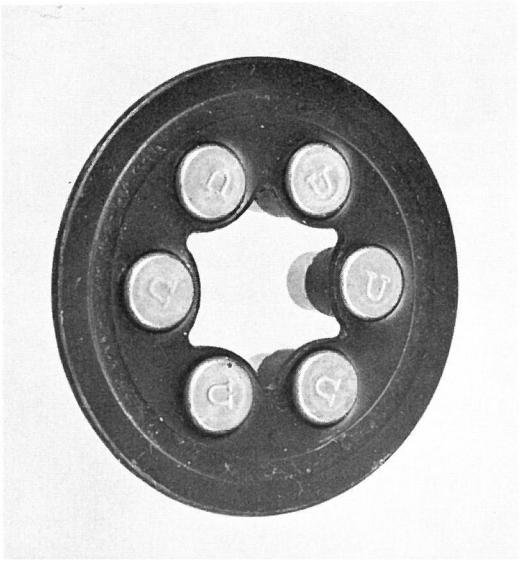


*Figure 57. Lightning Blank Adaptor*

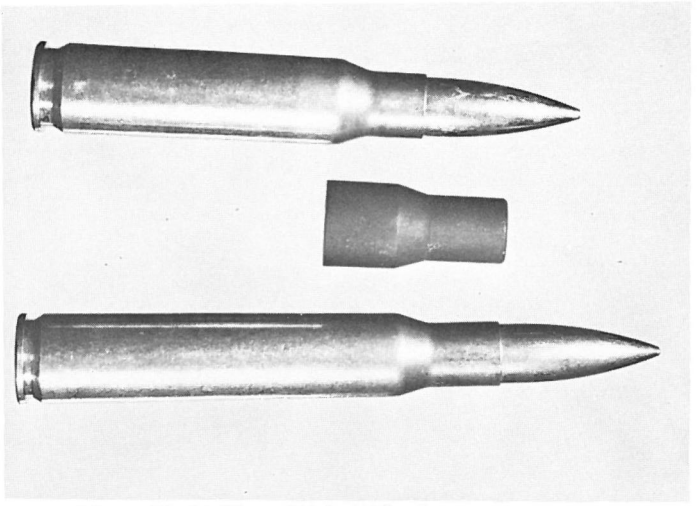


*Figure 58. Caliber .30 M1 Rifle Converstion to Caliber 7.62 mm NATO*

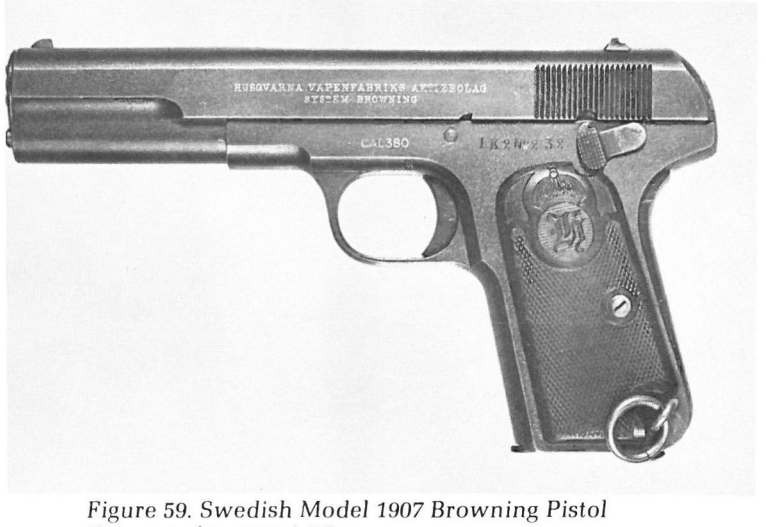



*Figure 59. Swedish Model 1907 Browning Pistol Converted to .380 ACP*

slide-action shotgun and then functioned, fired, and ejected from the gun like an ordinary shotshell. The manufacturer claimed a pattern of approximately 100 pellets in a 15" circle at 30-ft. It was also claimed to have sufficient power to shatter small clay targets and to be effective in controlling small rodents.

51. *Smith & Wesson Model 53 Revolver (figure 51)*

This double-action solid-frame revolver was introduced in 1953 in conjunction with the .22 Remington "Jet" Center-fire Magnum cartridge. The unique feature of the Model 53 revolver was its dual ignition system that permitted optional use of either rimfire or center-fire cal. .22 cartridges in the same cylinder. There are two spring-loaded firing pins in the standing breech of this revolver, with the upper firing pin striking the rimfire cartridge off-center and the lower firing pin providing center-fire ignition. The hammer nose pivots, giving a choice of rimfire or center-fire ignition, according to the type of cartridge in the cylinder.

Reusable steel adapter sleeves for the .22 long rifle rimfire cartridge are furnished with this revolver, and the .22 rimfire cartridges must be inserted into them by hand before loading the assemblies into the chambers of the revolver cylinder.

52. *Tri-Jen Auxiliary Cartridge*

Made by the Tri-Jen Manufacturing Co., of Los Angeles, Calif., this auxiliary cartridge was introduced in 1957. It was designed for use in center-fire pistols and revolvers and consisted of a hardened steel sleeve smoothbored to accept No. 2 lead shot. The base of the device was counter-bored to accept a conventional small pistol primer which acted as the propellant. In reloading, the fired primer was pushed out with a clearing rod and a fresh primer then seated in the pocket with the thumb. Reloading of the unit was completed by pushing a No. 2 lead shot down the bore of the device until it rested against the primer. These auxiliary cartridges were sold in sets of six and were made in various popular handgun calibers from .32 S&W Long through and including .45 Colt.

53. *Pointer Fast-Draw Adapter (figure 53)*

Designed to permit firing .22 rimfire blank cartridges in .45 Colt revolvers, this steel adapter was introduced in 1959 by the Southwest Cutlery & Mfg. Co., of Montebello, Calif. They were sold in sets of six. The fired .22 blank case had to be pushed out of the adapter by hand to prepare it for reloading. The off-center cartridge chambers eliminated the need for retiming center-fire revolvers to fire the .22 rimfire cartridge.

54. *Alcan Shotgun Adapter for .45 Colt Blank Cartridge (figure 54)*

In 1964, the Alcan Co. of Alton, Ill., introduced machined brass adapters to permit firing Alcan plastic-cased .45 Colt blank cartridges in break-action shotguns. Provided for dog training purposes and signaling, they were made in 10-, 12-, 16-, and 20-ga. sizes.

55. *Sport Ammo Mini Shell (figure 55)*

This device was sold by the Sport Ammo Corp. of Minneapolis, Minn. It is a nickel-plated die-cast metal sleeve with .410-bore and with a primer pocket for the standard No. 209 shotshell primer. It was made in 12-, 16- and 20-ga. sizes and was claimed to be adequate for miniature clay target shooting and small pest control. It would function with a shot charge and primer only, or with a 1.0-gr. charge of Bullseye powder and up to 50 grs. of No. 9 shot.

V.

*Miscellaneous Related Devices*

56. *Smith & Wesson Model 1917 Revolver Three-Shot Clip (figure 56)*

This ingenious 3-shot clip for holding three cal. .45 ACP cartridges was developed during World War I to permit the simultaneous extraction of clipped units of three fired cases from both Colt and Smith & Wesson Model 1917 revolvers. The fact that use of the clips speeded up charging of the revolver cylinder was incidental.

Two clips holding a total of six rounds are normally loaded into the revolver cylinder. In most

revolvers of this type, it is possible to fire the rimless .45 ACP cartridge without using the clip adapters, but the fired cases cannot be extracted simultaneously with the extractor as their rims do not engage it. In some Colt Model 1917 revolvers of early manufacture, the chambers were bored through and the rimless .45 ACP cartridge cannot be fired in them normally unless held in the adapter clips. If the clips are not used, the cartridges can drop through the chambers and fall out the front end.

The rimmed .45 Auto Rim cartridge introduced about 1923 made use of the clip adapters unnecessary in M1917 revolvers.

57. *Lightning Blank Adapter (figure 57)*

Introduced in 1961 by the Lightning Arms Co., of New Brunswick, N. J., this chamberless cartridge holder permits the firing of the .22 short rimfire blank in cal. .45 Colt, .44-40 WCF, .44 Special, and .38-40 single-action revolvers. Made of sheet steel, this adapter fits over the end of the revolver cylinder. Its six holes are offset so that the firing pins of center-fire revolvers will strike the rims of the .22 rimfire cartridges.

58. *Cal. .30 M1 Rifle Conversion to Cal. 7.62 mm. NATO*

An ingenious chamber sleeve for converting the cal. .30 M1 rifle to fire the shorter 7.62 mm. NATO cartridge was developed in 1962 by the H. P. White Laboratory of Bel Air, Md., in conjunction with the U. S. Navy. This conversion system requires that the chamber of the M1 rifle first be recut to maximum dimensions, or slightly over, so that all chambers within a given lot of rifles are uniform. The neck area of the chamber is then grooved annularly after which the expandable steel sleeve is inserted. One high-pressure and five standard 7.62 mm. service loads are then fired in the barrel to expand and lock the sleeve in place. The chamber is then finish reamed to final headspace dimension. Enlarging the gas port slightly and installing a filler block in the magazine well of the rifle to compensate for the shorter cartridge completes the conversion.

Beginning in fiscal year 1964, M1 rifle conversions were made in quantity for the U. S. Navy by American Machine & Foundry Co., Harrington & Richardson, Inc., and by the Naval Ordnance plant at York, Pa. The Army did not adopt this conversion system, apparently because of certain safety considerations.

This illustration shows one of the chamber sleeves flanked by a 7.62 mm. NATO cartridge on the left and a .30-'06 round on the right.

59. *Swedish Model 1907 Browning Pistol*

During the late 1950's a quantity of military surplus Browning Model 1907 semi-automatic pistols in 9 mm. Browning Long caliber were imported into the U.S. and modified subsequently to accept the .380 ACP cartridge. The modification consisted of boring out and then sleeving the chamber end of the barrel to accept the shorter .380 ACP round. These pistols were made under Browning license by Husqvarna Vapenfabriks Aktiebolag, Huskvarna, Sweden. The converted pistol can be readily identified by the "CAL 380" marking on the left side of the frame above the trigger guard opening.