

## The Real Ones Return

# Gunfacts

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**COVER PHOTO:** The front cover Parabellum is that identical gun handled by thousands at the NSGA and NRA conventions, a Mauser-made mockup of what is to come; guns on the rear cover are a Borchardt borrowed from Interarms, and a 1942 Mauser Luger with commercial banner marking. The story starts on Page 9 and it is a good one, indeed. Transparency is 4x5 Ektachrome exposed by floodlights by Fred Davis and Ken Warner.

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# the editor says

We now come up against it again.

This question of sample firearms has been much discussed at Gunfacts over the past few weeks. We have one importer more than somewhat annoyed with us; we are fixing to get another big factory bent out of shape; and we ourselves are somewhat annoyed at the following circumstance:

If we write about the sample gun that shows up here at Gunfacts, we will write, in most cases, about a select example chosen for us. Over the course of time, looking at something like 30 such guns, the Tech Staff has decided there is something special about editorial samples.

Generally speaking, the amount of selection a factory can accomplish is limited. That is, a selected arm is likely to have pretty good wood in it, and fit and finish will be the best of at least several dozen guns off the production line. The gun will be functionfired, and perhaps it will be fired on a range to see if it is roughly zeroed and not wildly out of kilter for grouping. We know this happens.

We also know that the regular production doesn't get this treatment.

Selection cannot make a silk purse out of a sow's ear. A lousy design remains a lousy design; well done ugly impressed checkering remains ugly; and so on. But, as in the case of the Remington rifles discussed on pages 25-27, selection can be effective.

The obvious answer would seem to be we should pay no attention to sample rifles; perhaps we should go out in the market and buy all test guns. There are a couple of hitches in that proposition.

First, there's the timing. You need to know, or want to know, about new arms. And if you're going to buy Gunfacts to get this knowledge, you better get it here as early as anywhere. Then, what are the statistical probabilities that one sample rifle pulled at random from a jobber's shelf is going to be any better representation than an editorial sample? It may not only not be as nice a gun, it might also be a real foul ball, unrepresentative from the negative point of view. Then, there's the money. As it stands, we have some money tied up in poor-performing guns,

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# THE PARABELLUM STORY

DWM-built 1900 Model the first Luger and one of the most beautiful guns ever made — shows characteristic dished back toggle knob with inset toggle lock. Magazine is a later version.

## by Jan Stevenson

## EDITORIAL NOTE

In this series, you will get the full details of Mauser's reentry into the sometimes-strange world of the Luger pistol. That the pistol is now called Parabellum and not Luger is just one of the weird angles.

Jan Stevenson, who put this full treatment—and the chapters which follow together in two grueling months of travel in Switzerland and in Germany, is not new to Gunfacts' readers. His reports from Europe have been complete and early without exception. However, this series on the Parabellum is something special.

This sort of thing isn't done, you know. This sort of information is supposed to be dug out years later after the dust is settled. In a way, this series will make all Gunfacts' readers instant experts on the post-1945 Luger. There are details herein that will surprise other writers who have written on the Luger, serious collectors, and, indeed, each of the sources quoted—the men of Mauser, SIG, Hammerli, Interarms will beyond a doubt find things they didn't know here in black and white for the first time.

As for why Gunfacts is bringing this to you: Well, who else would? Who else would provide the space, or commission such a complete story, or have, right on its own staff, the resources and the knowledge to check every checkable statement, survey every photograph? This is definitely a Gunfacts kind of

This is definitely a Gunfacts kind of story, and we're proud to bring it to you. K.W.



Jan Stevenson

Perhaps no handgun in history has been more widely used, more universally recognized, and so idolized as the Pistole Parabellum, or "Luger" as it's popularly known in the U.S. When production ceased at Oberndorf in December of 1942, some two and a half million German-built Lugers had been manufactured from the pistol's introduction in 1900. They had seen military and police service by a score of governments in all corners of the globe. More than two million were used by German forces from 1914 to 1918 in the muddiest, bloodiest battles the world has ever seen.

With a background like this, the Parabellum, it would seem, must have been decades ahead of its time. In actual fact, the gun made it on little more than looks. As many awards for industrial design indicate, the Luger is a beautiful gun. Rakish, sleek, and deadly looking, the Parabellum reeks of aristocratic elegance. The first touch reinforces the visual impression. An experienced pistol shooter will realize that the balance is too far back, the trigger pull is chronically horrid, and the gun is slow to get into action. But the amateur knows only that it feels great in the hand, and that despite his

untutored awkwardness, it seems to point perfectly for instinctive shooting.

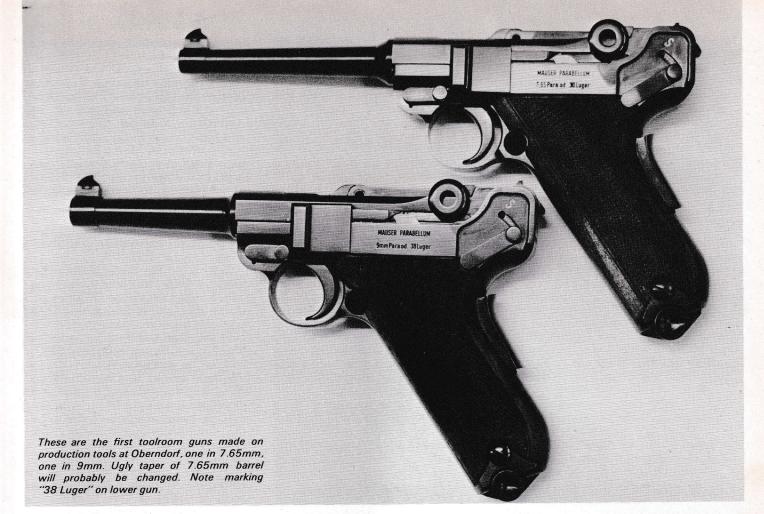
An *unbiased* appraisal shows that the Luger is delicate, jam prone, and prohibitively expensive to manufacture. By all logic, it was thoroughly obsolete by 1911. Yet it remained in service through the Second World War, and today is going into production once again.

When Mauser representatives, Parabellums in hand, turned up in the Interarms booth at the NSGA show in Houston this past February, most gunwriters and manufacturers as well were caught by surprise. The Parabellum, it was universally believed, could never

This is a 1942 Commercial Luger (note Mauser banner on toggle) and as such is out of Mauser's last commercial production, some 27 years ago.



In 1969, frames for the new Parabellum were racked in profusion in the Mauser plant at Oberndorf. The final product will differ in detail from that of 1942, but it will still be a Mauser.



be produced again. It is a machinist's nightmare, simply too costly and complex. A respected writer, happily ignorant of forthcoming events, went into print a year ago saying "it has been concluded that under present day costs each (Luger) pistol would cost at least \$400 to produce." That would indicate a retail price tag of something over \$1000 per gun. What sort of hat the writer conjured this number out of we don't know, but evidently his editor didn't think it so out of line.

Attempting to manufacture the original Luger once more at a salable price certainly ranks as a first rate gamble, if not an impossibility. Why Mauser would want to is obvious; how they expect to pull it off is somewhat less so.

Start with the fact that a market exists. There's an aura, a mystique, an almost hypnotic quality to the Luger that only one other gun can match. Some U.S. soldiers confidently toted plow-handle Single Actions of 1873 vintage off to Korea, trusting more in their mythical powers than in the demonstrable efficiency of more modern sidearms. Had the Luger been available, it would have been the choice of many on equal logic. Ruger and a host of others proved that the antiquated single action would sell on sentiment and silhouette alone to sportsmen, plinkers, and those who wished merely to enjoy the pleasure of possession. The commercial path was thus widened and paved for Colt's to reintroduce the Peacemaker.

It had been Mr. Ruger, sagaciously playing on the similarity of his name and Luger's, who introduced in 1949 his Standard Model 22 autoloader, with looks that are blatantly Teutonic. The looks, as much as the advanced design and reasonable price, of the Ruger Standard model earned it the popularity that made it the bill payer at the Southport plant for years thereafter.

More recently Erma in Germany and Stoeger in the U.S. have proved beyond doubt that the Luger looks sell.

Up to how high a price will sentiment sell a gun, and to how many people will it sell at that price? These are the questions which killed every attempt to put the Luger back in production since the Second World War. And until the answers are known, there will be a lot of fingers crossed at Mauser and at Interarms.

The Luger was not a dead issue after World War II by any means. Its corpse had been kicking vigorously ever since. And while this series will concern itself largely with the torturous and complex story of the Parabellum since 1945, we must look a good bit further back in order to put post-war events in historical perspective:

The Luger was derived directly from the Borchardt pistol, which was introduced by the Ludwig Loewe Co. of Berlin in 1893. Hugo Borchardt, the pistol's inventor, was a naturalized American citizen then employed by Loewe. Borchardt had immigrated to the United States with his parents when still a boy of sixteen years. In 1875, he became superintendent of the Sharps Rifle Co. of Hartford, Connecticut where he designed the Sharps-Borchardt single shot rifle. Later, he served as chief draftsman at Winchester. Returning to Europe, he became director of the Budapest Arsenal, but resigned this position and left Hungary rather precipitately after an alleged feud with General Fejervary, the Hungarian minister of war, over a lady's affections.

Georg Luger was born in the Tyrolean section of Austria in 1848. After leaving military service in 1872, he moved to Vienna and worked for many years with the Baron von Mannlicher, one of Europe's most brilliant arms designers. In 1891 Luger took an important position at the Loewe Co., and it may well have been he who brought Borchardt and his pistol to the attention of Loewe management. It is not clear whether Borchardt conceived and designed his pistol in the United States or in Europe, but the latter is somewhat the more probable.

About 1896 Loewe merged with the Deutsche Metallpatronenfabrik (German Metallic Cartridge Co.) of Karlsruhe to form the Deutsche Waffen Munitions - fabriken (German und Weapons and Munitions Co.) known throughout the world by its initials, DWM. Arms production remained at the old Loewe facilities in Berlin, while the Karlsruhe plant continued to make cartridges. Since this reorganization occurred in the midst of the Borchardt's brief six-year life span (1893-1899) the first pistols were marked "Waffenfabrik Loewe, Berlin," while later production carried DWM inscriptions. Combined production totals only a few thousand pieces.

Although the Borchardt pistol was tested by the U.S. Navy in 1894, the U.S. Army in 1897-98, and probably by Switzerland, Germany, and others as well, it never achieved either official adoption or widespread usage, and is notable for four reasons only:

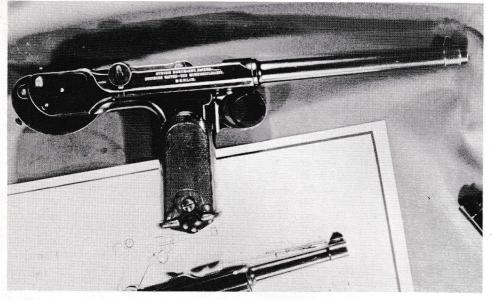
- 1. It was the first commercially successful selfloading pistol.
- 2. It introduced the now universal practice of feeding cartridges from a detachable box magazine located within the pistol grip.
- 3. It was highly advanced ballistically, chambering a 30 caliber

out over the shooter's wrist. This dictated the midships position of the grip, made the gun cumbersome, and looked like hell. Hugo Borchardt, so the story goes, stubbornly refused to admit that his pistol was anything short of perfect, and so lost the place in history that Luger gained.

Luger probably began redesigning the Borchardt late in 1897. Prototype transition pieces were made up in 1898 and 1899, and although one or both were evidently tested by Swiss military authorities in Bern in November-December, 1898 and again in Thun in May 1899, no examples of either transition model have survived.

The next year, 1900, saw the introduction of the first true Luger, and the first gun to wear the famous DWM scrolled cypher. If elegance were the measure of a fine firearm, then this pistol could not be bettered. The 1900 model was a beautiful gun, a seductive gun, and many discovered that with the Parabellum, love at first sight would be an enduring passion.

The Borchardt's monstrous recoil spring housing had been entirely eliminated; the recoil spring was now compactly housed just behind the magazine, inside the sharply raked grip. All screws, except for those holding the



This is the Borchardt, the design that started it all — toggle breech, magazine in grip, etc. Luger, in essence, simply compacted this gun, but did it beautifully.

bottlenecked cartridge and firing an 85 gr. projectile at over 1300 fps.

4. It sired the Parabellum.

To Georg Luger, the faults of the Borchardt were self-evident. Long, ill balanced and ungainly, only the beauty of the workmanship mitigated the gun's incredible ugliness. The 90° grip made it point poorly, and military panels criticized the surfeit of screws in its construction. The central problem was the bulbous mainspring housing extending grip panels on, had been eliminated. A hold-open device was added, and the trigger-sear connection was somewhat altered. The barrel was shortened  $2^{1/2}$ ." and overall length was reduced by 5". Weight dropped ten ounces from a ponderous forty to a pleasant thirty.

The Swiss, already well impressed with the Borchardt-Lugers they had tested, adopted the Parabellum on 2 April 1901, and let an order to DWM for 3000 pistols of the 1900 model. This, as we shall see, was one of the two most important single events in Luger history.

Hans Tauscher, DWM's controversial U.S. representative, was already hard at work. The month before he had met with Ordnance officers and had received an order for two test pistols and 2000 rounds of ammunition. Two weeks later, on March 18, the guns were tested at Springfield Armory with such favorable results that \$15,000 was allocated to purchase 200,000 rounds of ammunition and 1,000 Luger pistols for field trials. The guns were delivered and issued, and that's the closest the Parabellum got to being adopted by the U.S.

Later, in the U.S. Army Pistol Tests of 1907, which had been postponed from 1906 due to Georg Luger's illness, the toggle breech pistol, this time in 45 caliber, came out well behind the Colt and Savage contenders. The Luger was not recommended for field trials, and an order for 200 pistols each was let to Colt and Savage. At this point, Savage decided they didn't hold the right cards, and opted out. Ordnance Corps, in order to give the formidable Colt some charming competition, diverted the funds meant for Savage to DWM instead.

for Savage to DWM instead. Despite Tauscher's diligent if not frantic efforts, which continued into April of 1908, DWM decided they could not meet this order, which would have required considerable retooling because of the excessive girth of the U.S. cartridge. Probably their lack of interest resulted from the fact that Germany had at last joined the long list of European and South American armies which had adopted the Parabellum, and DWM had more business than they could handle—the second milestone. At any rate, Colt's famed 45 won by default, and the Luger, militarily, was thereafter a dead issue in the U.S.

Not so in Europe. Following the Swiss adoption, the Luger was tested by, in rapid succession, Sweden, Austria, Spain, Russia, and Canada. It was adopted by Bulgaria, Brazil, Chile, the Netherlands, and Portugal. According to DWM, Norway and Luxembourg as well adopted the Parabellum prior to 1906, but this remains in doubt. Another report indicating that some German officers were issued Lugers during the Boxer Rebellion of 1901 is also believable but unsubstantiated. The adoption of the Parabellum by the German Navy in 1904 paved the way for the final breakthrough which came in 1908, when the Imperial Army followed suit.

As the standard sidearm of the German war machine for 30 years, and of the Swiss citizens' army for 46 years, the Parabellum was fated to help write both the darkest and finest chapters of European history. Georg Luger was awarded Bulgarian knighthood, amassed a considerable personal fortune, and was received at least twice by Kaiser Wilhelm II. Hugo Borchardt was, by this time, quite forgotten.

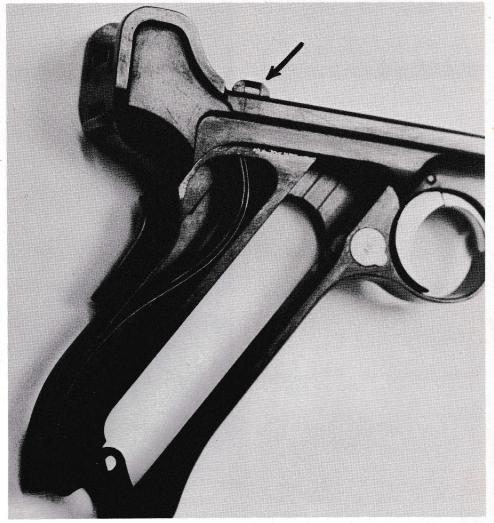
Although the Luger was, in essence, mechanically unchanged from 1900 to the introduction of the 1906 model, two intermediate models merit notation. The Model 1902 had a barrel lopped down to 4" from the previous norm of 434", and made bullishly heavier than before. Eleven hundred at most were made, of which 700 supposedly went to the U.S. commercial market. We would happily ignore this rarity except that it was the first gun to chamber the 9 mm Parabellum cartridge, the M1900 having taken the 30 Luger exclusively. Along with the increase in bore size came a change from four to six-groove rifling.

The Model 1904, again in 9mm, is even more obscure—Datig reports having seen only one, and it carried a two-digit serial number. This model wore a 6" barrel, a stock lug, and a 100-200 meter adjustable rear sight which was mounted on the rear toggle link. Its importance lies solely in the fact that, adopted by the Imperial Navy, it was the first Luger to see official German military service. As modified in 1906, and later in 1908, some 50,000 may have been made, although this figure is presently defying substantiation. At any rate, no more than a half handful of the original '04 issue were turned out.

The 1900, '02, and '04 pistols are referred to by the Germans as the "Old Models." 1906 saw a new model and a new ball game. Previous Lugers had used a laminated, two-piece flat recoil spring, the two pieces being riveted together at the top with the upper end of the front member forming a hook to engage the spring-breechblock assembly coupling link. The flat spring was a loser, prone to breakage and weakening. I've handled M1900's in which the spring was so weak that, even with the magazine out of the gun, the breechblock wouldn't fully close on more than seven out of ten tries, smartly released from a full-recoil position. Certainly these wouldn't have been up to the task of stripping off and chambering a cartridge.

At its lustiest, the recoil spring was, because of its design, almost untensioned by the time the breechlock was <sup>3</sup>/<sub>4</sub> way forward. Inertia, rather than direct spring action, was supposed to close the breech and seat the cartridge.

Probably because there was little more than habit keeping the breech assembly down in battery position, the old model Lugers had a springloaded latch called the "toggle lock" built into the right toggle knuckle,



1900-1904 models had 2-piece laminated recoil spring — a poor arrangement indeed. Toggle-lock hook (arrow) was dovetailed into frame.



Close-up shows toggle lock ready to pounce down on frame hook, providing it makes it. This was the model first adopted by Switzerland in 1901.

which snapped over a standing hook on the right side of the frame. Without this mechanical lash-down, the toggles could easily be brushed open in normal handling. As it was, to open the gun the toggle knobs had to be pulled straight rearward, causing the barrelreceiver unit to move back in the frame, until the toggle latch cleared the rear edge of the frame hook, at which point the knee joint was allowed to break upward. The toggle lock was cute, expensive, and worked fine as far as it went. It didn't make the Luger chamber reliably, although those tested by the U.S. in 1901 did astonishingly well, considering.

The 1906 model introduced a coil recoil spring, necessitating the addition of a frame-mounted rocker piece to hitch it to the breechblock assembly coupling link. The coil spring was no panacea, for the Ordnance report of the 1907 pistol tests loudly complains that it too is nearly relaxed by the time the breechblock nears battery, and that chambering was still more a matter of inertia than of direct spring pressure. It was an enormous improvement, though, so much so that the toggle lock was abandoned as unnecessary. Such collectors' designations as Model 00/06, 02/06, and 04/06 mean that the gun is an '04 type or what have you built after 1906 with a coil recoil spring and without the toggle lock.

As Datig notes, a collector singlemindedly intent on keeping the genealogy straight might prefer to label the German service pistol P.08 as the Model 02/06/08.

The grip safety was the next feature to go, not being included on the P-08. The German Ordnance Corps also decided that the hold-open device could be got along without as well. They soon changed their minds and almost all P-08's originally lacking the holdopen were called back to the plant for rework.

With the adoption of the Luger by the German Army in 1908, DWM lost its status as sole producer. The Imperial Arsenal at Erfurt tooled up for Parabellum production. By the end of the First World War, these two plants reportedly had manufactured the stunning total of some two million P-08's, along with fifty million spare parts.

The Erfurt facilities were dismantled after the war, and the Allied control authorities harbored a noticeable grudge against DWM as well. Under the terms of the Versailles Treaty, Germany was allowed a 100,000 - man army, and for sidearms, it turned to Simson & Co. of Suhl, the only authorized source from 1922 to 1932. Simson never actually fabricated Lugers, but assembled them from the



Mauser's old smithy, where Luger drop forgings were done. The French dismantled and demolished it after the war, hence Mauser now subcontracts this work.

enormous mountain of parts left over from the war. DWM, in the meantime, was permitted to manufacture for commercial and export sales.

Back in the States, the flamboyant Mr. Tauscher had been interned as an enemy alien with the outbreak of war, and his business was appropriated by the Alien Property Custodian. In 1922, the A.F. Stoeger Co. of New York acquired sole rights to the Luger in the U.S. About 1929, Stoeger registered the name "Luger" as a trademark, and began importing specially marked, new production pistols from DWM, and continued to do so for the next decade until the Nazi takeover in Germany claimed most arms production for the Third Reich military machine. For thirty years thereafter, Stoeger, with an unusual degree of either tenacity or foresight, managed to keep on hand just enough spare parts for the Luger to retain ownership of the name. Thus the new Mauser, when imported into the U.S., must be called Parabellum or some such-the Luger label being legally reserved only for the Wilhelm-designed 22 rimfire effort which Steoger tardily put on the market in 1968. (I've not used the Stoeger pistol, and reserve a good opinion of it until

I do. But I imagine Georg Luger would roll in his grave if he knew of this name game.)

At this point in time-the mid 1920's-DWM was again the sole German plant actually manufacturing the Luger. In 1930, the management of the Quandt Group which owned both DWM and Mauser decided to move Parabellum production from Berlin to the vast Mauser facilities in Oberndorf. The migration took place on the first of May, 1930, under the direction of the remarkable Herr August Weiss, who brought with him all the Parabellum blueprints and production charts, 800 machines, 4,000 finished pistols, and untold thousands of component parts. Herr Weiss had first been employed by DWM in Berlin in 1904, and specialized on the Maxim machinegun until World War I took him into the field of pistol production.

Save for Weiss himself, no personnel were transferred from Berlin for Parabellum manufacture, and as Mauser's new chief of pistol production, a position he was to hold until 1945 or later, it was Herr Weiss himself who sat down in Mauser's capacious *Schweden-bau* to teach his first recruit, a 15-year-old apprentice, how to build a Luger from the ground up.



Walther's P-38 was a vast improvement over the Parabellum, and could be built twice as fast. But even after its adoption, Hermann Goering insisted on Lugers for the Luftwaffe.

By 1934, production at Mauser was running smoothly, though the guns were still trademarked with the DWM cypher. Later that year, the DWM inscription was abandoned and most Mauser-built Lugers thenceforth were marked according to German secret coding procedures. As the codes were changed with every security scare, Mauser Lugers will be found coded variously: S (1934), S/42 (1934-36), 42 (1936-41) and "byf" (1941 and after).

A parallel line was run carrying the commercial Mauser crest trademark, and though a few were sold on the open market, most guns so marked filled foreign military orders, principally: 1170 pistols to the Dutch Navy from 1930-1939; 1000 guns to Persia (Iran) in 1936; 4000 or 5000 guns to the Netherlands in 1940. Smaller orders went to the Netherlands again, to Latvia, Sweden, Portugal, and elsewhere.

With another war approaching, a second, and as it turned out, quite unwilling Luger producer was added. The unpredictable *Reichsmarshall* Hermann Goering decided in 1934 or thereabouts that his Luftwaffe would be armed with Lugers to be supplied by the Heinrich Krieghoff firm of Suhl,

in which he had either a personal or a financial interest. Krieghoff acquired some of the still plentiful spare parts left over from 1918, and cheerfully went to work assembling Parabellums. In 1939, in a typical example of Nazi irrationality, the tune was changed. Krieghoff reportedly was ordered by the Waffenamt to prepare another 15,000 Lugers for the Luftwaffe, but this time he must manufacture rather than merely assemble them. With more urgent things to do than attend to this rank foolishness, Krieghoff attempted to beg out, saying quite truthfully that they could not complete the order, and offering to fill a portion of it instead. He was ordered to have all 15,000 finished and delivered within the year—by the end of 1940.

Two years before, Walther's double action 9mm had been adopted as the P-38 to replace the whiskery old toggle gun. The German field services loved the Luger, but the Ordnance Department didn't; the wretch was simply too expensive and time-consuming to build. Mauser and the *Waffenamt* had been engaged in a shouting contest for the past half dozen years as Ordnance kept forcing the price down, much to the detriment of Mauser's profit sheets.

P-38 production was scheduled to commence at Mauser in July of 1941;

the Luger was to be dropped from the line in June of 1942. In fact, the Parabellum remained in production until that December. The month before, November of 1942, the army accepted delivery of 1000 Lugers they hadn't asked for. A final 4,000 were fitted up in December, but the Army didn't want to be bothered with them, and Mauser was authorized to sell them to Portugal, where they were joyously received and dubbed the Model 943.

Meanwhile, Krieghoff, two years behind on Hermann Goering's order, was still in there slugging valiently. Two years later, in 1944, he was still at it, and had serial numbers up nudging the 12,000 mark, still some 8,000 shy of completing the order: he never made it. As far as is known, Krieghoff actually manufactured pieces where he'd left off with those which had previously been assembled from available parts. Krieghoff's pathetic efforts in 1944 mark the last actual Luger production in Germany. Goering added insult to years of injury by wearing a Smith & Wesson revolver when he surrendered.

According to German Military Monthly Acceptance Sheets for the P-08 which Donald Bady provided to Fred Datig, a total of 412,898 Lugers were delivered to the German armed forces from September 1939 to December of 1942 when production halted at Mauser. This includes the final 4,000 which went to Portugal. Adding the above to known export figures-principally to Portugal, Sweden, Latvia, and the Netherlands-then tacking on Krieghoff's gesture, we come up with a total of some 440,000 Lugers manufactured between 1928 and the close of the Second World War. Were we to estimate the number supplied by Simson to the post-Versailles Reichswehr, unrecorded commercial and foreign military sales, and the untold thousands that must have been put up from parts here and there during the confusion following the First World War, then the total number produced between late 1918 and the end of the Second War must be easily a half million.

The Luger had served Germany well. It was long past time for the curtain to be dropped and for the old soldier to fade away. That's not what happens.



## Gunfacts Shoots:

# Erma's Toggle-Top 9MM

ERMA is just about neck and neck with Mauser in the race to put a toggle-breech 9mm Parabellum Luger look-alike on the market. Both companies, by dint of considerable strain, managed to come up with prototypes or display pieces for the NSGA show in Houston this February. At present there is only one prototype Erma Parabellum in existance. I saw receiver forks for several more being machined at the plant, and serial production is hoped to be under way by September, 1970.

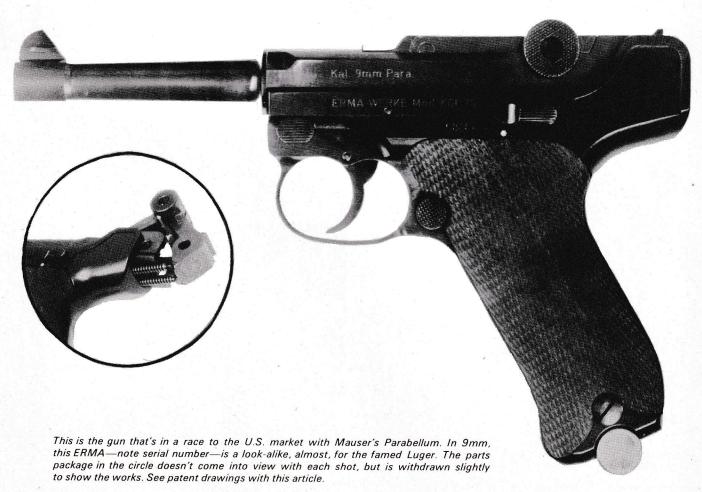
(Gunfacts was at the NSGA Show. Erma may have had this gun there, but Gunfacts neither saw it nor heard of it.) The KGP-70, they call it, duplicates almost perfectly the external appearance of the old Luger, except for the trigger and trigger guard. Inside it's totally and entirely different. ERMA, their patent applications not yet officially filed at the time I visited the plant, would permit no detail disassembly of the pistol and no interior photographs whatsoever. As best I could tell from a glance into the action, this is how she works:

Unlike the Luger and previous ERMA's, the KGP-70 is not striker fired, but has a concealed hammer mounted in the frame behind the magazine, which impacts a firing pin in the breechblock. She's double action for the first shot like the P-38 or

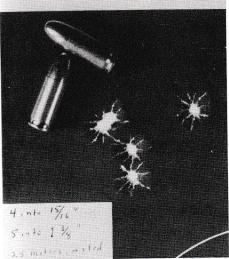
## by Jan Stevenson

the S&W M39. The trigger pivots on an axis pin when pressed, pulling the drawbar ahead. The drawbar engages behind the tail of the hammer, beneath the hammer pin. Thus, as the tail of the hammer is pulled ahead, the top of the hammer rocks back against the mainspring and is tripped as it nears full cock position.

As is usual, the hammer is cocked by the recoiling components and the second and all succeeding shots let off single action. For this, the drawbar trips a separate sear which engages the hammer full cock notch. Disconnection is achieved by a rocking member above the drawbar on the right side of the frame. ERMA deftly retrieved the gun when I got interested in this piece.

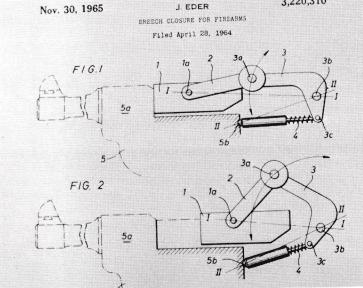


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Stevenson's trial group is shown, ran 1-3/8" from rest at 25 meters. At right, the toggle linkage is shown as it appears just before closing the action. Note thumb safety.

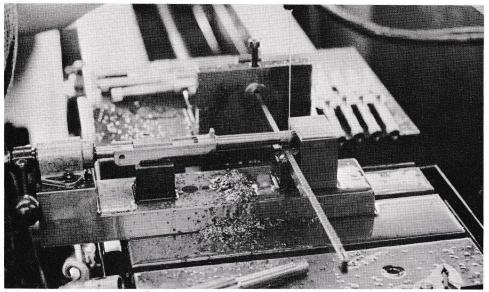




Patent drawings detail big difference that changes lock from Luger's positive breeching to a hesitation lock. Spring shown is doubled in production version.

Toolroom gun maintains classy Luger looks up top. Cypher reads "EMW."

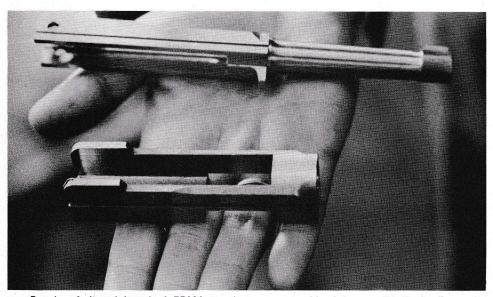




Cutting sight slots happens well before the barrel is finished in ERMA's plant, which is now building parts to feed production lines.

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MANUFACTURER:	Erma Werke Waffen-und Maschinenfabrik GmbH, Dachau,
	Germany
TYPE:	Retarded blowback, semi-auto pistol
MODEL:	KGP-70 for "Kniegelenk Pistole" or "knee joint pistol".
CALIBER:	9mm Parabellum
BREECHBLOCK:	Unlocked, toggle-link type, U.S. Patent #3,220,310
WEIGHT:	29.1 ounces
HEIGHT:	5.5 inches
LENGTH O.A.:	8.4 inches
BARREL LENGTH:	4 <sup>1</sup> / <sub>3</sub> inches
SIGHTS:	Fixed; pyramid front in v-notch rear
SIGHT RADIUS:	About 8 inches
TRIGGER:	Double action for first shot; single action for all succeeding shots.
SAFETY:	Thumblever on left side of frame; blocks hammer from reaching firing pin.
MAGAZINE CAPACITY:	8 rounds
IMPORTER:	L.A. Distributors; available late 1970



Receiver fork and barrel of ERMA toggle-top are machined from solid. Rest of gun mixes aluminum, investment castings, etc., but makes solid unit, Stevenson thinks.

The manual safety is a simple flatface tumbler which permits the hammer to reach the firing pin when disengaged but takes hammer impact itself when applied. It does nothing more, neither tripping the hammer nor blocking the trigger. The safety lever lies handily under the thumb and wipes off effortlessly as the gun is brought to firing position.

Double action pull was not at all bad, but grated a bit as if the action needed lubrication. Single action was horrid. The eighth-inch of slack I didn't mind, but the next sixteenth inch of creep was ghastly going. The design of the action permits an excellent trigger pull if ERMA chooses to do the hand fitting any good trigger requires.

Foul trigger and all, the gun shoots handsomely. My first 5-shot group, precariously rested on a vise top, went into 13/8" at 25 meters with four shots inside 15/16". Sights were the reprehensible original Luger type; ammo was German DNG.

Rare on Parabellums, the breech of the KGP-70 is not really locked at all, but is of the retarded blowback or "hesitation lock" species. The knuckle axis is set very slightly above an imaginary line connecting the breechblockfront toggle pin and the rear toggle pivot point. The breech assembly is kept closed by two powerful framemounted coil springs bearing against the tail of the rear toggle piece. Thus gas pressure attempting to open the breech must work not only against the recoil spring, but against the tremendous mechanical disadvantage imposed by the nearly in-line toggle units as well. As the "knee" breaks, the mechanical disadvantage becomes much slighter, but so does gas pressure.

It seems to work fine—recovered brass was in absolutely perfect condition, with no visible swelling of the case whatever. And the gun has to eat proof loads, or it can't leave the plant, by law.

Construction is intelligent. The frame, which serves as an envelope for the action and the non-recoiling upper assembly, is an aluminum casting. The receiver fork is machined from solid bar stock, and the toggle units are investment-cast steel machined and ground to final dimensions. All told, the gun seems well designed, simple to build, and of good quality. Price has not been established, but I would hazard a guess in the \$125 neighborhood -certainly not much over this. Reliability, at any rate, is sure to be better than the Luger's. ERMA is mightily pleased with the KGP-70. With this one they feel they'll mine the Mother Lode. They're apt to be right. 

