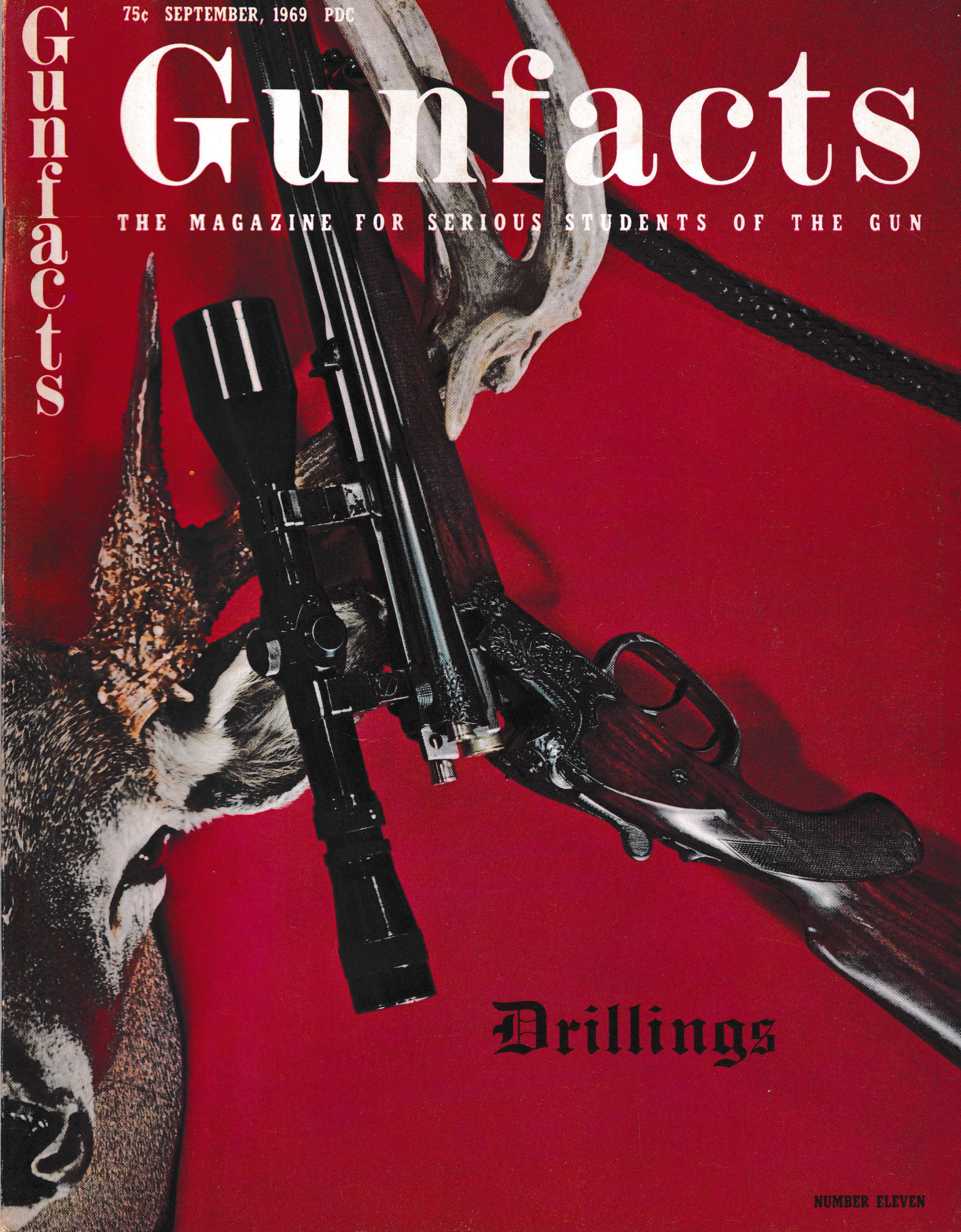


75¢ SEPTEMBER, 1969 PDC

Gunfacts

# Gunfacts

THE MAGAZINE FOR SERIOUS STUDENTS OF THE GUN



Drillings

NUMBER ELEVEN



# Gunfacts

THE MAGAZINE FOR SERIOUS STUDENTS OF THE GUN

Published by Hazard Publications, Inc., Fred Davis, Jr., President

Volume 2, Number 9

September, 1969

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**COVER PHOTO:** The usual drilling, like the two on the back cover, is a three-barrel gun, the top two barrels for shot. The front cover gun is a Franz Kettner *Doppelbuchse drilling* — it is a double rifle with a shotgun barrel below. In 9x57R and 16 gauge, it is the arm with which the magnificent whitetail head was collected two seasons ago by Fred Davis. The guns on the back cover are a classic pre-WWII Sauer 16x16x 8x57R and an equally classic German military survival gun, 12x12x9.3x74R, also by Sauer. Photo by Fred David and Ken Warner on 4x5 Ektachrome using an overhead camera and floodlights.

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# the editor says

You won't believe this, but advertisers are interested in our being objective. No fooling—we have several expressions of direct interest in our continuing to tell it like it is. As a matter of fact, I have proudly filed one man's letter under "I never thought it would happen." This guy, may his tribe increase, has threatened (or perhaps a better word is *warned*) he will withdraw his advertising the first time he sees us backing off.

The way I figure it, we have him from here on out.

That will be our acid test.

Of course, there's an acid test for him, too, sometime in the future. What will be his reaction if we chance to look over some product he has and it turns out it could stand improvement and we say so? Then we'll really know, won't we?

As long as we are on the subject of advertisers, you can't help noting that we have a few more this issue. I'll tell you right now we'll have a few more next issue, too. And, hopefully, we'll continue to do so. This magazine is a commercial venture and cannot ignore any legitimate source of income.

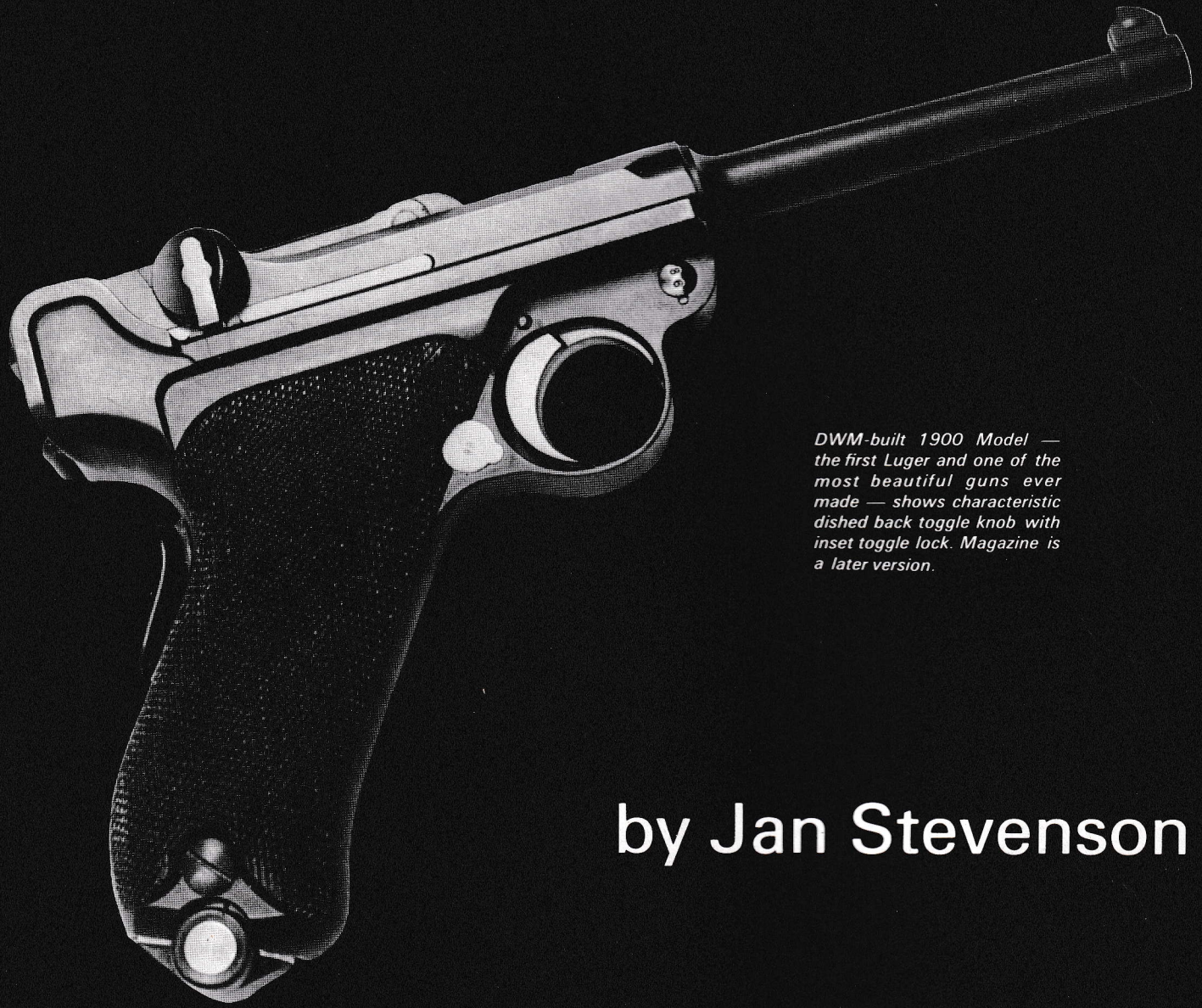
We think we can run the ads and still offer the most solid firearms information on the stands. You wait and see.

On the back page, you'll find a new institution for Gunfacts—a visiting columnist, I guess you might call him. Back-page columnists are swinging in all the hip outdoors publications, so herewith is our entry, one Frank Marshall Jr. You have probably read a couple of rifle reviews he's written for us.

I don't know much about Mr. Marshall, but he suits me. He has, I am told, all kinds of trophies from his match-shooting days, and he has, I know firsthand, a vast store of memorabilia and fact and opinion—informed opinion—on shooting. I have been on the same range with Mr. Marshall on perhaps 12 or 15 occasions. I estimate that he fires an average of 200 centerfire rifle rounds a week and has been doing that since



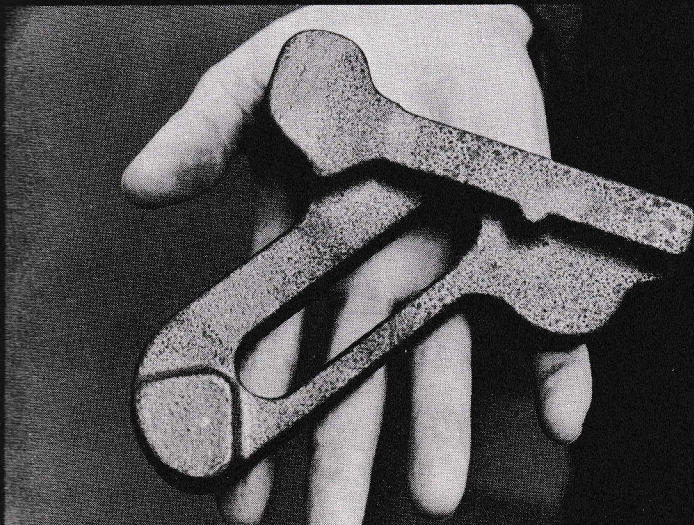
# THE PARABELLUM STORY



*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

This is Part III of Gunfacts' exclusive examination of the processes and the pistols that have led to the new Mauser Parabellum





# THE PARABELLUM STORY

by Jan Stevenson

Mauser and Interarms started kicking the Parabellum question around in 1962.

*Direktor* Lubenau viewed the project favorably, but since he was nearing retirement he felt he'd best not make a decision which might well hang his successor. In 1964 *Direktor* Adam took over the *Mauserwerke*, and the Parabellum and HSc projects both got the positive go-ahead. The HSc, obviously the more manufacturable of the two, took priority, and the M66 rifle, which at this time was giving severe problems in manufacturing and rather dismal accuracy, spread Mauser's engineering staff fairly thin. Mauser and Interarms representatives met about three times a year thereafter to keep up a bit of momentum.

On the 21st and 22nd of February, 1967, Mauser held a press conference in Oberndorf to which some sixty-five representatives of the European shooting press were invited to witness the formal unveiling of the M66 rifle. During the course of the conference, Mauser announced their plans to put the Luger back in production. Their proposed delivery date to Interarms of early '67 already drifting past, they now hoped to have it available by early '68. It would be a faithful copy of the P-08, and would retail at \$300. Mauser must have gagged on the number, for it duplicated Hebsacker's estimate exactly.

The P-08 was what Interarms wanted. Mauser dusted off what old Second War blueprints and worksheets Herr Weiss had managed to abscond with before the French destroyed them, and began to work from there. I recently examined P-08 engineering drawings at Mauser dated 1967.

The deeper Mauser got, the more impossible the project looked. Their thoughts drifted toward Switzerland, unravaged by war since Napoleon's day. With the acquisition of what the Swiss must certainly have in storage, perhaps just slightly dusty, Mauser's preliminary headaches and expenses alike would evaporate, and the project would get back on schedule. It wasn't that easy.

To start with, *Waffenfabrik* Bern, the obvious first stop, had been what the Swiss call a "*kopfwerke*"—literally translated "head works." They assembled the gun, and manufactured a few essential parts such as the receiver fork,

but mostly they coordinated. Actual production of the components of the Swiss Luger was farmed out to 110 subcontracted firms. SIG, for instance, was the only plant which made the vital frame. In a manufacturing prospectus published sometime in the late 1950's or early '60's, SIG had shown a photograph of a Luger frame and receiver fork, in the white, probably to illustrate the sort of intricate metalwork of which they were capable.

Mauser went to the Swiss too late. The year before, 1966, SIG had hauled all their old Luger jigs, dies, and gauges out and put the torch to them—they needed the space. The machines had long since been put to other uses. Moreover, SIG was decidedly not interested in subcontracting the frame for Mauser. Besides being tied up on other work, SIG, it is widely felt in Switzerland, has always opposed a reintroduction of the Parabellum for fear it would cut heavily into sales of their own SP47/8.

Mauser wound up back at Bern. When Bern subcontracted a firm, they supplied one copy of the blueprints and one of each gauge necessary for every measurement and inspection required in manufacture. Duplicate copies of the paperwork and a set of master gauges were kept at Bern. It was up to the manufacturer to build jigs, set up his machinery, and construct as many extra gauges and so forth as were required. These he was quite at liberty to destroy or do with what he chose at the expiration of the contract, *but the original drawings and gauge set supplied by Bern had to be returned.*

As far as gauges and drawings went, then, the *Waffenfabrik* had two of everything when Mauser came knocking. An agreement was reached, probably in the fall of 1967, and the actual transfer took place around the first of December, 1967, when Mauser sent two trucks down to Bern to fetch the gear back to Oberndorf.

For the not insignificant sum of \$60,000 Mauser received the following:

1. One copy of the entire M1929 production package: blueprints, parts drawings, work sheets, tolerance calculations, etc.
2. One of each inspection gauge necessary for reading every dimension of every part in the gun.
3. About 30% of the necessary jigs.
4. All of the blueprints, drawings,

and calculations Bern had made in 1960 when redesigning the M1929 for the Swiss gunsmiths.

5. Three pistols: one each of the 1906 German contract model, the Swiss 06-24, and the M1929.

In addition Mauser evidently bought about fifteen Model 1929 pistols on the Swiss commercial market. Bern meanwhile retains a duplicate set of the M1929 blueprints and other paperwork, and the master gauges.

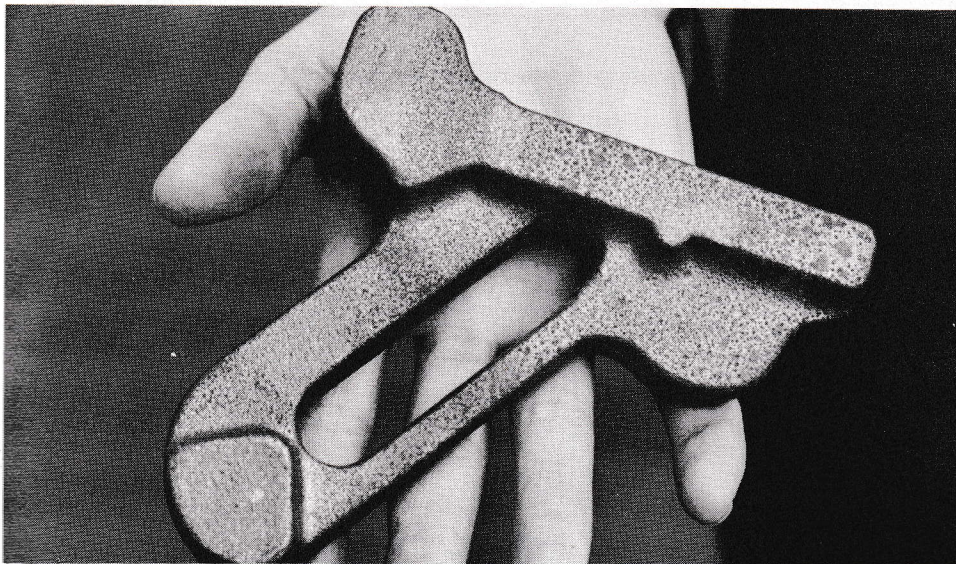
With this acquisition Mauser committed themselves, intellectually and emotionally at least, to produce a Swiss pattern pistol rather than the P-08 Interarms had requested. But the more Mauser engineers studied the Swiss material, the more evident it became that the Bern purchase was not the Godsend they'd hoped for. This for several reasons:

Mauser's engineering and production facilities are set up in accordance with German Industry Standards (DIN). To them the Swiss blueprints seemed all backwards. Where the Swiss read a plus-only tolerance the Germans read a minus-only and so forth. The blueprints would have had to be redone for this reason alone.

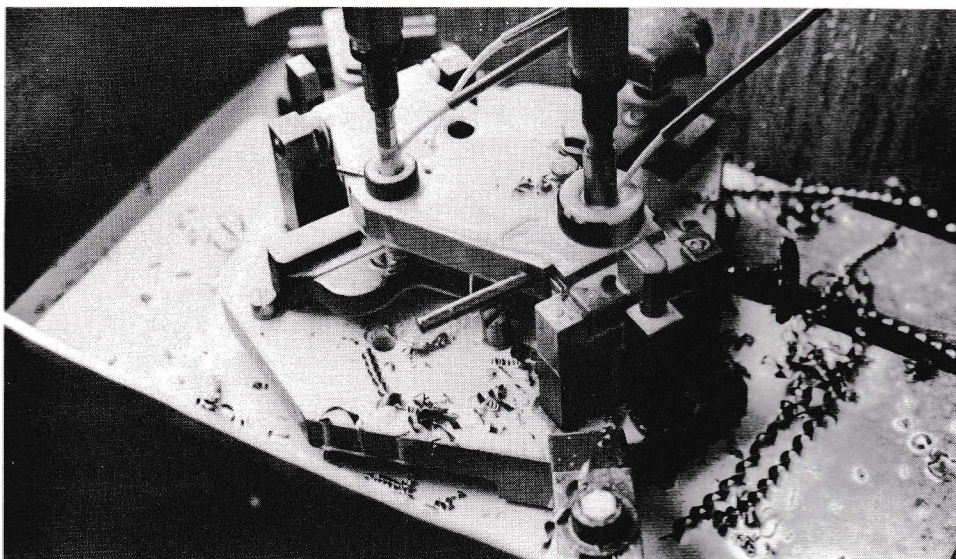
A more serious problem was that the jigs, worksheets, etc. were geared to 1930's production methods—indeed, the way Mauser had built the gun in the same era—and a far cry from the way they'd have to do it today.

For instance profilers, reading off a control die, were not used in Switzerland, nor in Germany either until the P-38 went into production at Mauser during the Second War. With the Luger, the work always moved around a static tool, rather than the tool's moving around the work. Every curved surface on the frame then was the arc described by the frame as it pivoted around to meet a cutter of a given radius. The pivot points were the holes drilled for later placement of the safety, the magazine release, the magazine base, the takedown latch, or the trigger guard. Today, of course, these same holes are used to attach the work to the jig, but the jig stays static as the pre-programmed tool moves into the work and does what's to be done. Thus, while the Swiss were able to save time, money and bother by making the frontstrap of the Model 1929 straight rather than curving it out at the bottom, such external contours





*New Luger starts life as a 56-1/2 ounce drop forging, subsequently loses 83% of this bulk during 101 machining operations.*



*After planing to lateral specs, magazine base, mag release, and thumb safety holes are drilled to give jigs a place to grab during later operations.*



*Mauser let an immediate order for 30,000 frame forgings to the smithy, had some 5,000 of these in work when Stevenson made these photos in late March. Later orders will level off at 1000 a month.*

make little difference today—the 1969 tools can describe a curved line quite as quickly and easily as a straight one.

In general modern production methods didn't catch up with the old Parabellum. The only exceptions which come to mind are the grip safety on the 1929 Swiss which was cold stamped, and the frame-mounted rocker piece which engaged the recoil spring guide rod in the P-08. Originally machined from a solid block, this piece was produced from section stock during the war.

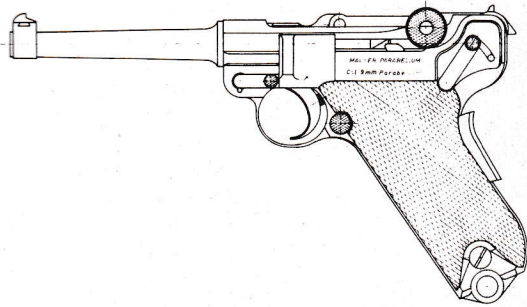
The new Parabellum, as we'll discuss shortly, will of necessity depend heavily on such modern techniques as investment casting, in which instances the Swiss drawings, jigs, and gauges are clearly of little use. Besides, the 250 gauges Bern supplied were fairly antique and nowhere near as precise as Mauser, who shares facilities with her sister company, the measuring instruments division, is accustomed to using.

The way it finally worked out, say the Mauser engineers who handled the Swiss artifacts, they had to completely redo the drawings and tolerance calculations to conform to German Industry Standards. The work sheets of course were done up from scratch to follow new production procedures. The jigs, they say, had to be scrapped completely, and the only items salvageable were just a few of the production gauges. This corresponds with what I've seen in the Oberndorf plant.

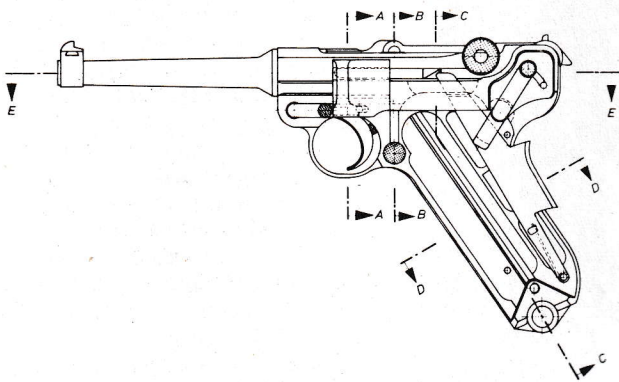
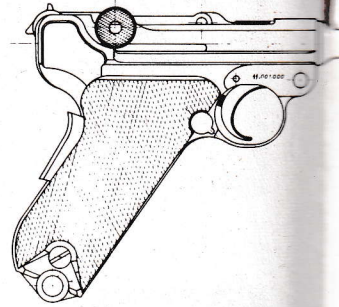
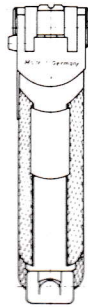
Either Mauser had ulterior motives for making the purchase in the first place or they took a clobbering on the deal. The Swiss of course came off handsomely. They got their money, they still have duplicate drawings and their original set of master gauges, and Mauser is making a Swiss pattern pistol. Before Oberndorf had the first prototype finished, an order from Bern for spare Parabellum parts to make Swiss shooters happy again was sitting on the desk.

The obvious problem in producing the Parabellum is to avoid going bankrupt paying the guys who run the machines. The old Luger offers worthwhile instruction in this respect, and here it would be prudent to correct the many ill-founded opinions of those who have injudiciously imbibed the data presented on page 305 of Datig's *The Luger Pistol*. According to Datig, to produce a Luger pistol from scratch required a total of 642 machine operations plus 136 hand operations. The machine operations required 78 minutes while the hand operations ate up an hour and twelve minutes. This gives a brand new Luger for 2½ man and machine hours, fast work by anybody's standards; sounds more like the Sten gun. Datig, a fastidious researcher who is usually very careful in labeling

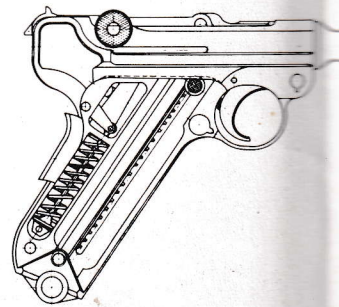
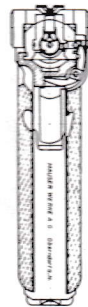




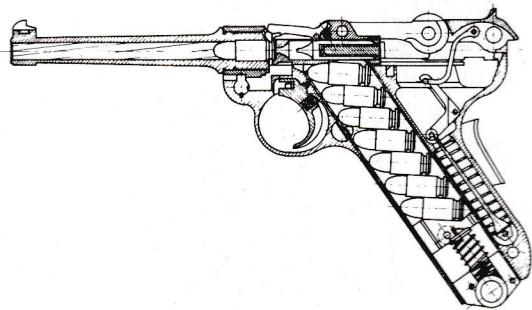
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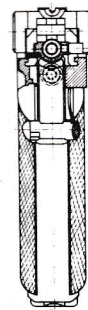
Schnitt A-A



Schnitt F-F

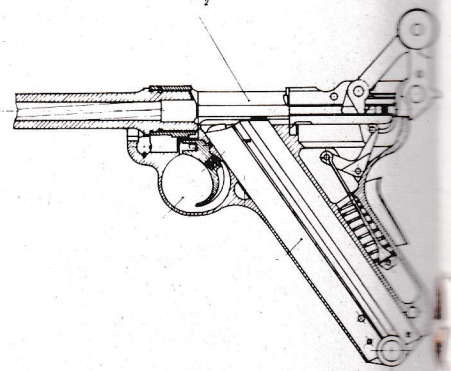


Schnitt B-B

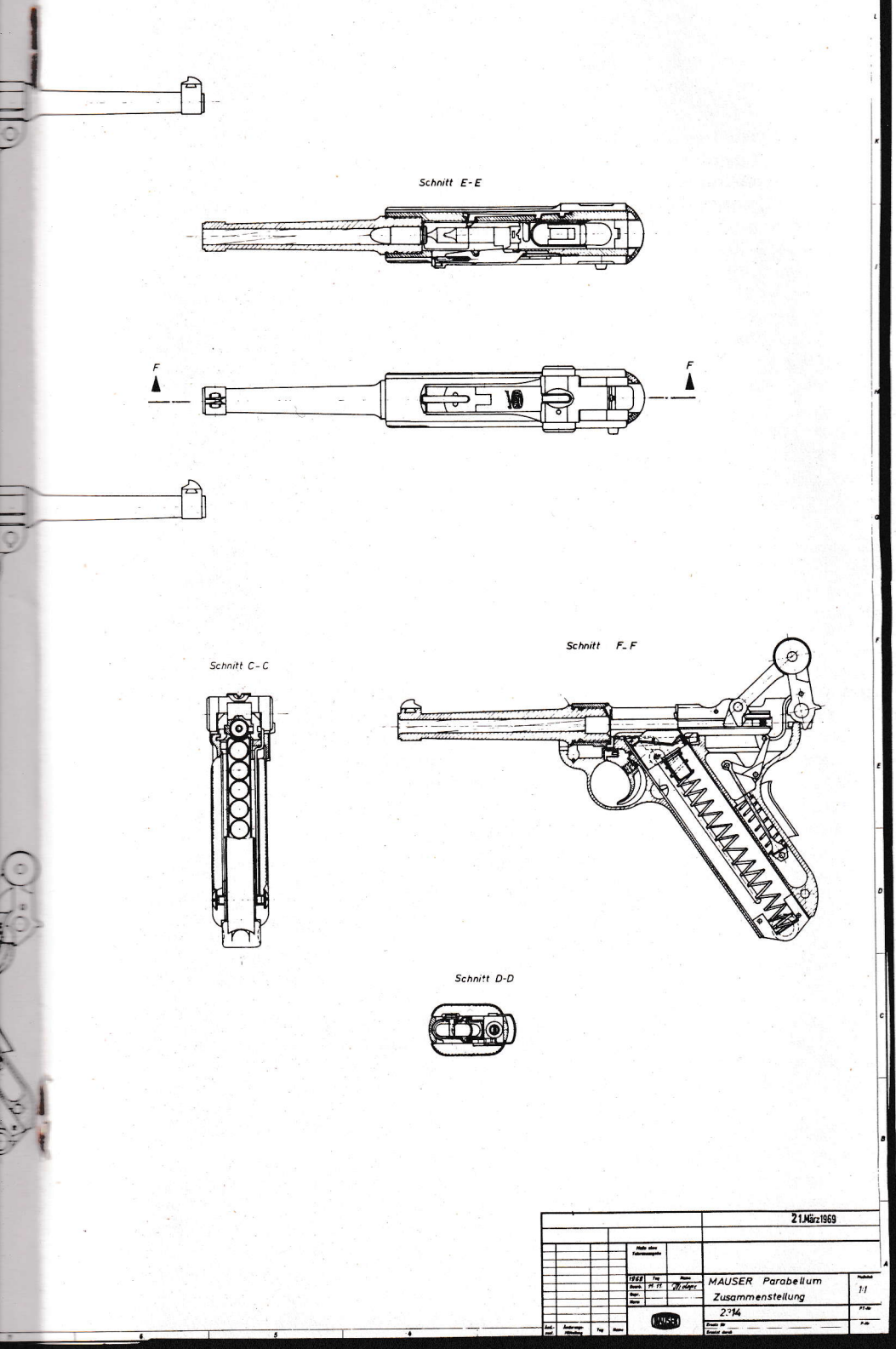


Schnitt F-F

2







|                    |    |                  |    |
|--------------------|----|------------------|----|
|                    |    | 21. März 1939    |    |
| Name des Zeichners |    |                  |    |
| 1939               | 11 | MAUSER Parabelum | 11 |
| Zusammenstellung   |    |                  |    |
| 23/34              |    |                  |    |
| 23/34              |    |                  |    |

the various shades of truth, credits this information to his old friend, August Weiss. And it was Herr Weiss who clarified things for us:

Datig's figures, Herr Weiss said, refer only to those operations on the P-08 which Mauser paid for on a piece-work basis. Everything paid on an hourly basis was in addition. This enlightenment, besides accounting for a lot of additional hours, can uncover a lot of extra operations as well.

Extrapolating from personal experience, let's look at a Smith & Wesson revolver: In assembling the cylinder and guts to the frame there are perhaps two dozen fitting points where files, stones, or the mallet may have to be used. Smith & Wesson pays for this as piece-work, and considers it as two operations: one man fits and aligns the yoke, while the next man fits the cylinder, the entire action, times the piece, and adjusts the trigger pull along with a plethora of other things. How many actual "hand operations" are involved here? A lot more than the two Smith & Wesson would say they are paying piece-work for! And how many *actual* hand operations lie concealed in the 136 for which Mauser paid piece-work rates in 1939? Many indeed.

For one thing, the P-08 was hand-fitted twice. The first fitting, while the parts were soft, was a veritable field day with hand files. After heat treatment the parts came back for what the Germans called "*schwarzmontage*" or "black fitting," where warp and distortion had to be corrected.

In addition to concealed operations, the quoted figures did not include the numerous gaugings and inspections, both factory and governmental, which the P-08 and its components underwent in the course of manufacture. Nor does it include proof testing, magazine loading, sighting in, cleaning, greasing, or merely trundling the parts from machine to machine or deburring them when they come out.

Herr Weiss's recollections come much closer to the truth than do official statistics when he says that roughly 650 machine operations and 450 hand operations were required to build the P-08, and that twelve hours of labor went into each gun.

This figure from Herr Weiss's prodigious memory has lately received interesting corroboration, and incidentally speaks well of the efficiency of his foremanship. I recently asked one of the Mauser engineers on the Parabelum project how many man and machine hours, with the modern techniques they were using, would be required to produce each new Luger. He toyed around with a slide rule for a minute, and seemed somewhat shaken



to find that at the outset each gun, it seemed, would be eating about twelve hours of work. This was a rough answer, he explained, and he hoped it wouldn't last long. Indeed it can't last long if Mauser is to survive the experience.

The Luger was always a pig for tooling. Herr Weiss's crew turned out the P-38 comparatively effortlessly with 450 machines. Yet to run Parabellums in any significant quantity at all required a minimum of 750 machines. It was not as a luxury that he brought 800 machines with him when production was transferred from Berlin to Oberndorf in May of 1930.

By modern standards this is a gross excess of tooling. Many were small machines for picayune operations on over-complex parts. Yet Mauser engineers were absolutely correct in deciding that if they were to come out of this Parabellum effort with their shirts, their best move would be to spend lavishly for heavy tooling to cut down on man hours, while application of advanced manufacturing techniques would pare machine time and total number of operations. Anticipating much tighter tolerances than had previously been held, the soft fitting operation was abandoned; the new Luger will be entirely hard fitted. Glancing again at U.S. experience, Smith & Wesson abandoned soft fitting of their revolvers years ago.

Before examining the results of these prudent intentions, it would simplify things to find out where the gun is going to be built. As we've already mentioned, SIG turned Mauser down on an exploratory inquiry for subcontracting the frame or receiver fork or both. Assumedly, Mauser asked elsewhere as well. It was generally expected in Europe that a major portion of the new Luger would be built at Manurhin in France, where the HSc slide and frame are manufactured. And no one would have been surprised if some Parabellum parts had been farmed out to the Heym plant in Munsterstadt as well.

Somewhere along the line, Mauser says, they decided, and wisely so, to keep the Parabellum all in the family. It's quite a family. For the past  $\frac{3}{4}$  century Mauser has been a part of the vast Quandt holdings, along with DWM, IWK, NWM, and some forty or so other companies. To start with, Luger production will be contained within the IWK division of Quandt Group. By 1971, all operations are expected to be transferred to Mauser in Oberndorf.

At the moment, Mauser-AG, the gunmaking outfit, is busily whittling away at the frame and barrel, and will soon go to work on the sideplate, trigger, holdopen device, and the main-

spring guide rod as well. Mauser-GmbH, the precision instruments division, is building the receiver fork, while IWK in Karlsruhe is starting work on the toggle links and breechblock. Rifled barrel blanks, measuring  $25\frac{3}{4}$ " long by 1" diameter come from NWM (Netherlands Weapons and Munitions) while finished magazines are supplied by Hollandia, another Quandt-owned Dutch company. Other components are sprinkled around various IWK companies, while pins, springs, screws, forgings, castings, and such are prudently subcontracted wherever the work can be done best.

Back to where we left off—going whole hog on machinery was one of Mauser's smartest moves. It is reliably reported that Quandt Group laid out a quarter of a million dollars to tool up Mauser-AG for the components that will be built there. Another \$100,000 worth of Parabellum tooling went to Mauser-GmbH, and it took an additional \$87,500 in machines to get IWK moving on the toggle links and breechblock. To top it off a final quarter million dollars went for fixtures and gauges, all around. This tots up to \$687,500, plus \$60,000 on the Bern purchase, plus three years of engineering costs, plus overhead, plus getting a raft of subcontractors off to a cheerful start, which explains why Joe's Custom Gunshop never tooled up to make Lugers, and why a lot of hopeful importers went home unhappy.

Wages, to say nothing new, are what establish the cost of any manufactured product. Since machines are run by men, and highly paid men at that, machine hours, in effect, are man hours in some proportion or other. To expect Mauser to turn out a Luger from forgings and solid blocks of steel by the antiquated methods of a long-gone yesteryear is crassest assininity, and I'd have written them off as rankest fools had they not done what they did so well—that is, prepare the Parabellum for manufacture by the most modern methods possible.

Perhaps the two most unreasonably complex pieces in the entire pistol were the sideplate and the trigger. Mauser is wisely investment casting them both, a move which I heartily applaud. The trigger bar, which, mounted in the sideplate, transfers trigger pressure to the sear, is cast as well, as is the recoil spring leg, which we've previously referred to as the frame-mounted rocker piece which serves as an intermediary between the recoil spring and the recoil spring-breechblock assembly coupling piece. The S-shaped coupling piece itself, which takes a lot of strain, will still be machined from a forging. The safety lever also will be cast, again an excellent application.

The barrel is turned down from rod or bar stock, as are the magazine latch and the takedown latch on a smaller scale. The frame and receiver fork are both machined from forgings, while the toggle links are fabricated from section stock, or profile material as the Germans call it, and the breechblock is machined from a solid bar.

Indeed, the only suspect piece in the entire gun is the sear, which will be made of sintered iron. Sintered iron, the mainstay of powder metallurgy, makes an incredibly hard and amazingly precise part, but is brittle and tends to crumble a bit on corners under heavy wear. There are many excellent applications for this process—indeed, Remington has a whole division devoted to it—but sears are suspect. One American handgun maker got badly burnt when they went overboard on sintered iron parts about five years ago. Sintered iron is dangerous in sears when the sear faces form opposing lips, as they do in most revolvers. The Luger sear is quite different though, and may lend itself admirably to this process. The engagement surfaces on the Parabellum sear and striker are truly expansive, and form broad, flat faces rather than fragile lips.

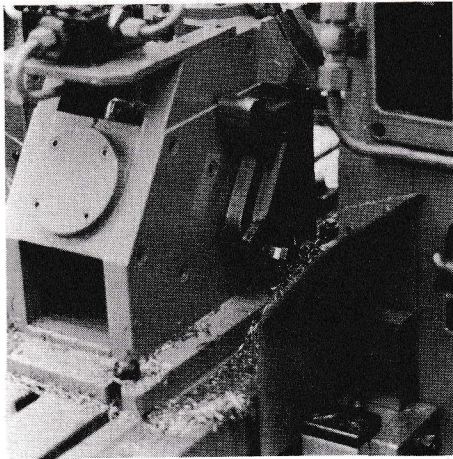
Being no metallurgist, I am cautiously optimistic about the use of sintered iron for the Luger sear. However, I'd want to see it take 10,000 rounds of test firing before giving it an OK, and I'm sure Mauser will do this or better before putting it on the market. Even before the first prototype was built, Mauser had fitted a sintered sear into a Swiss M29 and had run 2500 rounds through it. I examined this piece and could detect no wear whatever on the notch.

The real hangup to using a powder metal sear, as I see it, has to do with the trigger pull. Lugers are chronically foul in this department, and part of the correction involves bending the sear. A sintered sear simply won't bend, and a file's not going to cut it either.

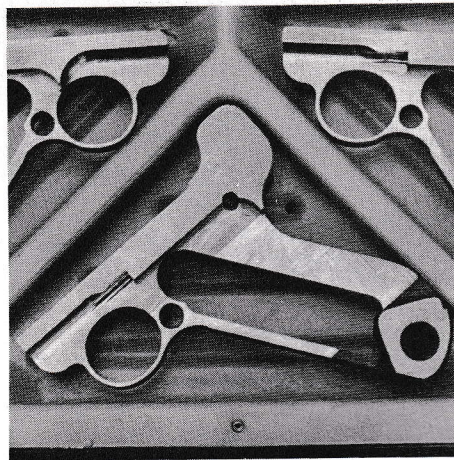
Given a sintered sear and a bucketful of cast parts, one might wonder, as I did, why Mauser is going to the incredible bother of chiseling a 270 gram frame out of a 1600 gram forging. A small calculation shows 83% of the material, not to mention a few hours, gets whittled and frittered away in the process.

Much verbal rubbish is heard about the superior quality of forged parts, which hearkens back to the comment of Professor Schlesinger in Berlin, who said, regarding the German arms industry in the 1930's, they manufactured chips with guns as an incidental by-product. Some wag in the U.S. picked this up later and applied it, quite accurately, to Colt.

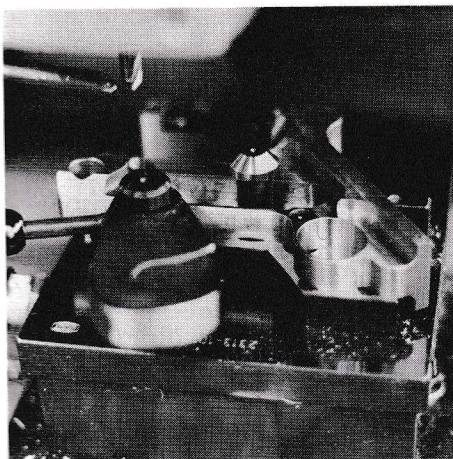




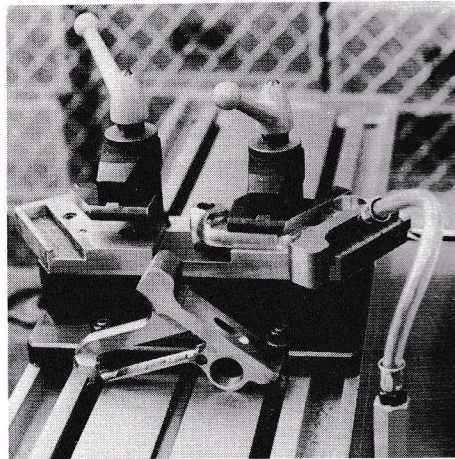
*Preprogrammed machine handles 2 frames at once—one on each side—routs trigger guard and magazine recess from side.*



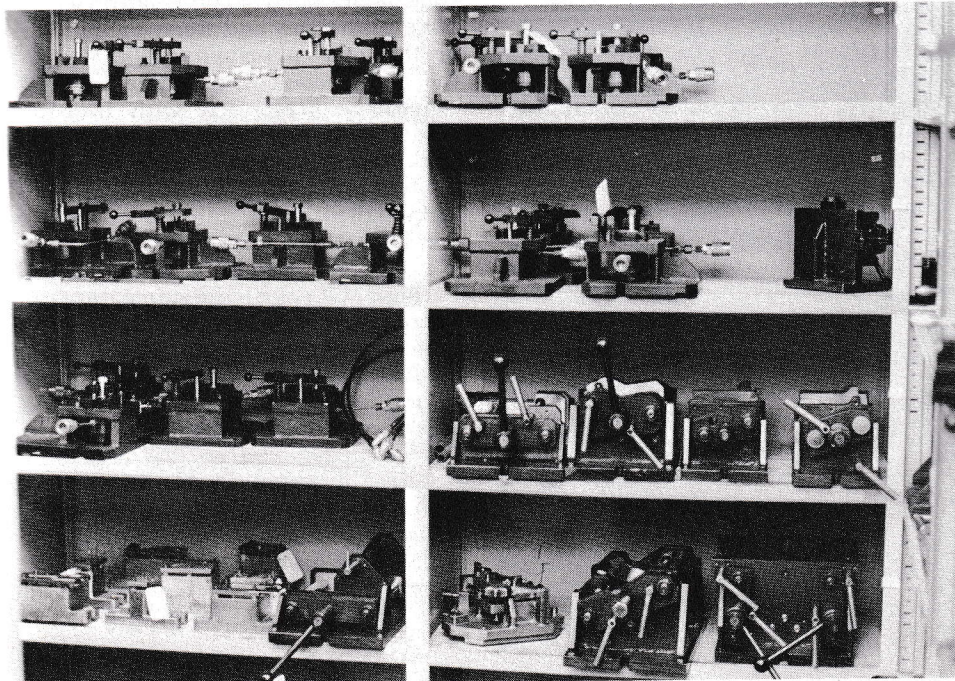
*Parts are served at the machine in lunchroom-like partitioned trays. These frames have undergone the first four operations.*



*With the part locked in place, tool will rout recoil spring recess, then make a pass along the grip straps. Note Mauser crest on left corner of shop-built jig.*



*Two at once again. This tool will drill magazine well preparatory to broaching, one assumes. This was a far as Mauser had got when Stevenson visited the plant.*



*A small portion of the quarter-million dollars worth of jigs and fixtures that Mauser built and had built from scratch for the Parabellum. All this just to hold the parts in the machines.*

Anyway, Mauser at present is putting exactly 101 machine operations and approximately 25 inspections into each frame. This takes time. It's all well and good to envision running a profiler once or twice around the piece to get the outside contour, but the fact is that the part goes through six operations just to get waste stock off before they can put the profiler on it. Inside machining tells a similar tale. Why not cast it for starters? Tool wear would be slightly greater, perhaps, but total machining operations could be cut by 30% and stock removal would be reduced by 90% or better.

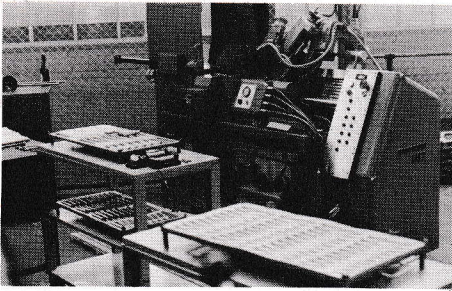
The answer is easily found. In Europe as in the U.S., foundry lag time from receipt of order to delivery of a cast part runs to almost a year while lag time on a forged part is only some three months. As an ancillary reason, Mauser does have more experience in working forgings than castings. But they were also nearly three years behind on their contract with Interarms, and in my opinion took the fast and self-sacrificing alternative. They let an immediate contract for 30,000 frame forgings, with 1,000 per month to follow thereafter, and tooled up to handle them. That's a lot of frames, and inertia has a way of setting in, but although no one will 'fess up to it, I'm still looking for the Luger to come through with an investment cast frame within the next three years.

Without doubt the most charming machine in the plant is a Dubied 517 programmed lathe which sells for something over \$16,000 from the plant in Neuchatel, Switzerland. This device profiles the outside of the barrel, performing what was previously six separate operations in less than two minutes, and takes the place of an entire department. Despite this, the Luger barrel, prerifled though it is, still takes thirty operations and ten inspections to bring it to finished form, which gives some hint as to how come the gun costs money.

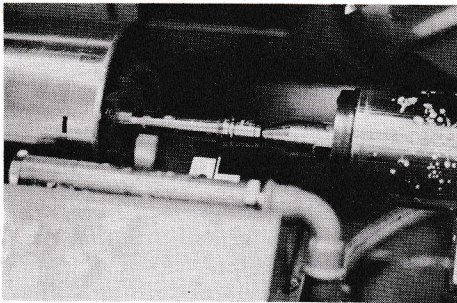
When I was at Mauser 10 days before this writing in March, 1968, some 5,000 frames, by rough estimate, were in work, and were about halfway through the manufacturing process. Barrels were briskly emerging out the back of the Dubied 517 into a bin, but the chambering machine, though uncrated, was not yet in operation. *Messzeug Division* was tooling up for the receiver forks, but hadn't yet started work. Incredible as it still seems, the Luger is coming back, and is almost upon us.

Vorgrimler's research department had built two prototypes to check out the blueprints, but these were torn down and in heat treat. If the prototypes perform, a fifty-gun pilot run will be launched immediately, and the





The cunning Dubied 517 is the backbone of the barrel making department; indeed, to date it is the barrel making department, costing a reported \$16,000.



A second after this picture was taken, the machine spit the barrel out the back into a bin. It does everything but make pictures of itself.

schedule calls for 5,000 finished pistols by the end of December. January of 1970 will see Mauser swinging into a production schedule of 1,000 Parabellums a month. This is something shy of the 600 Lugers a day Herr Weiss was turning out from 1938 to 1942, but still is a bit hard to comprehend.

Think back to the tooling-up expenses—747,000 documented dollars Mauser laid out to put the Luger back on the line. Add in the incidentals and it comes to an easy million and a half, just to launch a pilot run. This for an order of 10,000 to 20,000 guns which all sources agree is the requisite minimum to put the Parabellum back in production? Not quite.

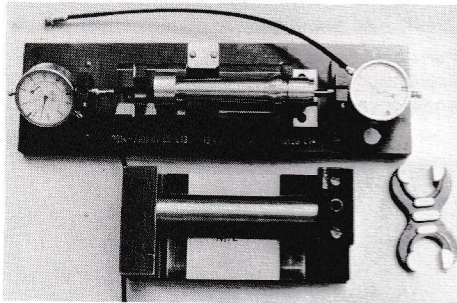
Interarms' contract with Mauser calls for the delivery of 100,000 Lugers over a ten-year period—enough to arm every officer, non-com, and enlisted man of the post-Versailles Reichswehr, and some twenty times more than any previous prospective importer has been able to envision selling.

Again, it's a fairly simple matter of economics. Interarms has the money, and with a firm order of that magnitude, Mauser can expect to amortize their expenses about halfway along, and start pulling a decent profit, this barring recession and supposing the piece sells to Interarms' rosy expectations.

Mauser, with "100,000" all but painted on the office walls, is letting Interarms have the basic model with 4" barrel for approximately \$80 each,



In a blizzard of cutting oil, the Dubied does what was formerly six separate operations in the space of a few heartbeats. Without tooling like this, the Luger couldn't be built again.



Barrel blanks are gauged before and after going into the Dubied machine. Dial gauge allows +.1mm from barrel flange to breech face, and -.2mm from back of sight base to muzzle. All three gauges are Mauser-built.

which is some 35% below their and Hebsacker's previously announced estimates of 1967 and 1964 respectively, and some 30% below Waffenfabrik Bern's rock bottom price to the Swiss Gunsmiths for a rough-finished, re-champed Model of 1929. Which goes to show that there's some sort of difference between a 10,000 gun order and a 100,000 gun order. Or else that Swiss purchase wasn't such a lame-brained loser after all.

In order to avoid presiding over the funeral of both firms, Interarms will hold their mark-up to the bare minimum in an effort to make the gun sell to their optimistic expectations. The 4" barrel model will retail in the U.S. for about \$160—I earlier would have been surprised to see it as low as \$200. The 6" model will go for about \$170, and the 8" model with barrel-mounted long range sights will run \$180, both reflecting Mauser's mark-up exactly, says Interarms.

As an interesting interjection, it is reported that Mauser was approached in 1959 by a prospective American importer all eager for Lugers. He happened to have gone precociously to the right place, but his order potential probably didn't far exceed four dozen guns. At any rate, it's said that Mauser told him they could supply 100,000 Lugers for \$85 each—roughly \$5 over Interarms present contract price for the same size order. This has to have been a facetious quote. At the time Mauser wasn't even seriously plan-

ning to make sporting guns, much less Parabellums. They had no tooling, no drawings, and no cost study to consult. Either this off-the-hat answer was accurate by accident, or else the people at Oberndorf had it psyched out all along.

Who'll buy 100,000 antique pistols? Save in one or two possible variations, the Parabellum doesn't rate as a serious arm. Luger collectors, as a sales base, are a captive market for Mauser's new playthings. They've no choice but to buy every variation that appears. Where I running the show, I'd exploit them ruthlessly. I'd usher forth every variation that Fred Datig and Harry Jones ever dreamed of, and I'd match Colt's every commemorative issue from the Gadsden Purchase to Hawaiian Statehood. Anything to sell the old lemon!

Interarms, doubtless, will be less vicious. They have a well developed sense of aesthetics, and seem to want the Luger to move at least partially on its own merits, whatever those may be. No artificial commemoratives will be forthcoming, but a number of variations will appear if for no other reason than to get the show back on the path they originally chartered.

Mauser's first effort, in the three barrel lengths, will be pure Swiss, save for the milled rather than lathe-turned receiver ring. Interarms from the first wanted the P-08; they wanted the curved frontstrap; they wanted a stock lug; they wanted a magazine safety; they wanted a blue rather than a black finish. These changes, by the nature of things, will come through piecemeal, and each alteration will be collectable, fated to appreciate in value. Nine millimeter and thirty-caliber will be the lead calibers, but 1971 will see the introduction of a necked-down 22 centerfire. Mate this with the 16" model with the detachable and legal stock and it starts to look interesting.

Most interesting of all, Interarms claims they have military orders for the Luger, and not in Latin America. If pressed for a guess, I would hazard Portugal. Of course the sideplate won't interchange with current Portuguese Lugers, and the Portuguese are hurting for sideplates. But since the sideplate is now investment cast, you can just as well make one as the other.

The further you go, the more fascinating it gets. That's how it is with the Luger, and finally, after decades of diligent effort, and for no really practical reason at all, it's back.

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