

HANDGUN
PROFILE

PART ONE

Evolution of the Dan Wesson Revolver

By MIKE BARACH

THE design of a firearm as well as the time and money expended for development are, for the most part, unimportant to the firearms enthusiast. Since we pay for the development and production of a gun in the purchase price, we have a tendency to be unaware of the demands that must be met to successfully market the firearm. As with all products, a basic design is necessary, followed by the capital to tool-up and

Three Full-Length
Features Focus On The



QUICK-SHIFT REVOLVER

E VOLUTION of the Dan Wesson from an ugly duckling to a respected name in handgunning. . . .By Michael Barach

S HOOTING the Dan Wesson with a look at its potentials for hunting, target and combat. . . .By Massad Ayoob

CUSTOMIZING the Dan Wesson which has been factory modified through evolution so that little remains to make it a top notch competitor. . . .By Massad Ayoob

Color photo by John Hanusin

produce a working prototype. Then comes the costly, time consuming job of refinement and modification to eliminate the imperfections in the gun's overall make-up. Testing, further refinements, and re-testing to insure proper functioning and performance are necessary before full scale production runs begin. The continuous improvements in both quality and design are a never-ending process if a gun company is to

stay alive in the business.

Probably no one is more aware of this than Dan Wesson Arms, Inc. The Dan Wesson firm is very young and relatively small in comparison to some of their competitors. They do, however, have one of the best handgun designers in the world as both part owner and president of the company. Dan, the fourth generation of the gunmaking Wesson family, has devoted most of his life

to the design and manufacture of high-quality handguns. In light of all Dan's experience with the handgun it was natural for him to develop a totally new revolver design, one aimed at true interchangeability of barrels and working parts by the shooter rather than the factory. Until this time, switching barrel lengths and action parts such as the hammer, strut, sear, trigger and firing pin connector, required sending the

gun back to the factory for a long wait and a parts and labor bill to boot. The Dan Wesson concept did away with this, as well as offering strength in design and a high degree of accuracy. All for a modest price.

The basic design of the revolver had been on the boards and prototyped for two years prior to its introduction in August of 1970. The gun was labeled as the Model 11 Service and the Model 12 Target. The guns were the same except for the 11 having a satin blue finish with the high ramp front and dovetailed rear sight and the 12 offering a bright blue finish with the fully adjustable sight set-up. Both were offered with interchangeable barrels in the choices of 2½", 4", and 6" lengths, and either combat or target-style grips. A few were produced in nickel, but these never went into full scale production. Retail was a reasonable \$110.00 with extra barrel assemblies available at \$25.00 each.

I remember seeing the Wesson Model 12 for the first time at the local gunshop. It was, in my estimation, the ugliest damn thing I'd ever seen! Of course, looks are secondary to performance, but we humans are attracted more to things of beauty. I did check the gun out pretty well at the time and I wasn't very impressed with it. The overly large sights, rough action and squared off corners did not impress me. However, I was very enthused by the interchangeability of barrels and inherent accuracy of the Dan Wesson gun.

EARLY PROBLEMS

The basic design of the Dan Wesson revolver was innovative to say the least, but mechanical problems began to appear. After the gun had been on the market for a time and been put to use in the field, problems with the firing-pin were encountered, prompting redesign. The original had a straight shank measuring .075" in diameter. This wasn't strong enough to take repeated blows from the hammer, resulting in a crack or break along the shaft. A new, tapered firing-pin was made, mea-



What was once a schoolhouse is the present home of Dan Wesson Arms in Monson, Massachusetts.

suring .100" at the base of the shank, tapering to .075" at the tip. A larger tapered firing-pin spring was implemented to create a stronger ignition system. Likewise the firing-pin hole, located in the frame, had to be enlarged to accept the new firing-pin. The re-design of the above proved satisfactory with no subsequent failures.

Reports from the field further indicated that the owners had also been experiencing misfires. It was determined that insufficient force exerted by the mainspring and the very short hammer fall were the cause. By increasing the spring pressure to the hammer and re-designing the structure of the trigger, hammer and strut, misfires disappeared.

FIRST MAJOR IMPROVEMENTS

In September of 1971, the Models 11 and 12 were replaced by the Model 14 Service (fixed sights) and the Model 15 Target (adjustable sights). The external muzzle nut was dropped and replaced with a recessed nut. The flat muzzle

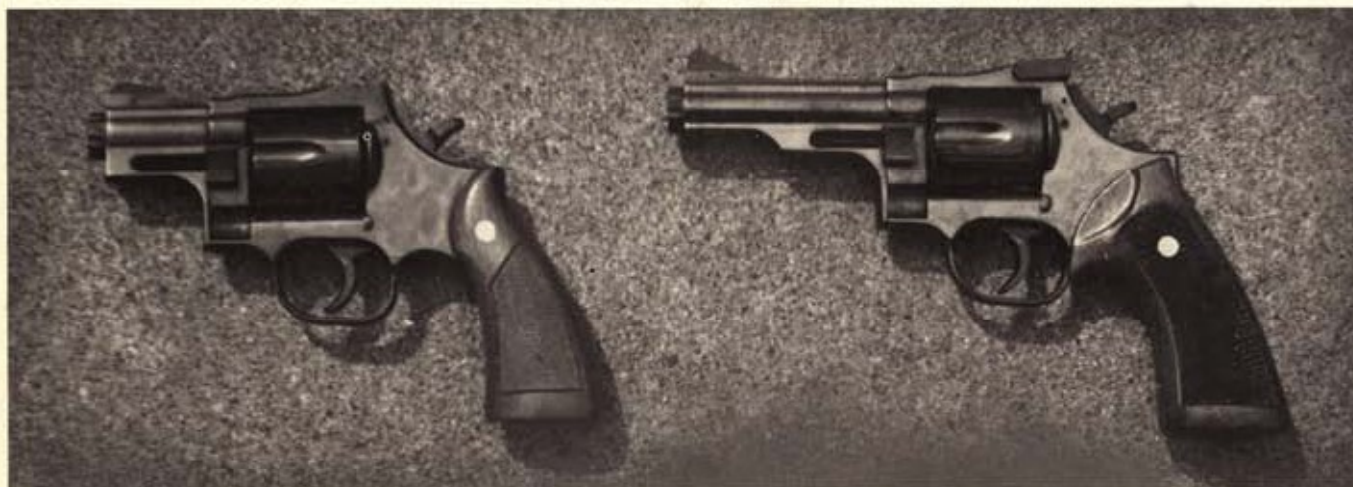
looked better and, in theory, contributed to better accuracy. The 14 series of revolvers was offered in either satin blue or matte nickel finish, with the 15 series available in bright blue or nickel finishes.

Because of the difficulties experienced in the short hammer throw, an improved longer hammer fall began to be phased into production. This occurred in about April of 1973. To lengthen the throw of the hammer, the rear portion of the trigger had to be lengthened and similar modifications made to the strut. It might be of interest to note that the design of the Dan Wesson action is such that modifications to the action parts can be performed by changing their structure without a full-scale change in the revolver's basic design. Even with the improvements made to the hammer fall, the Dan Wesson continued to boast the shortest throw available.

Continuously striving to improve both functioning and styling, the 14 and 15 were closely examined to improve upon any parts of the gun that would upgrade both quality and performance. Aware of the lack of general enthusiasm, and appeal to the shooters, the Dan Wesson people began to implement changes in the revolver. The Models 14-1 and 15-1 replaced the 14 and 15 series marking the beginning of a slow but almost total revamp of the gun's appearance and external parts. The Model 14-1 Service revolver was equipped with a low profile ramp front and milled rear sight, replacing the larger fixed sights of the earlier Service guns. The 15-1 sights were likewise switched from the large adjustable set-up to a lower ramp front and adjustable rear.

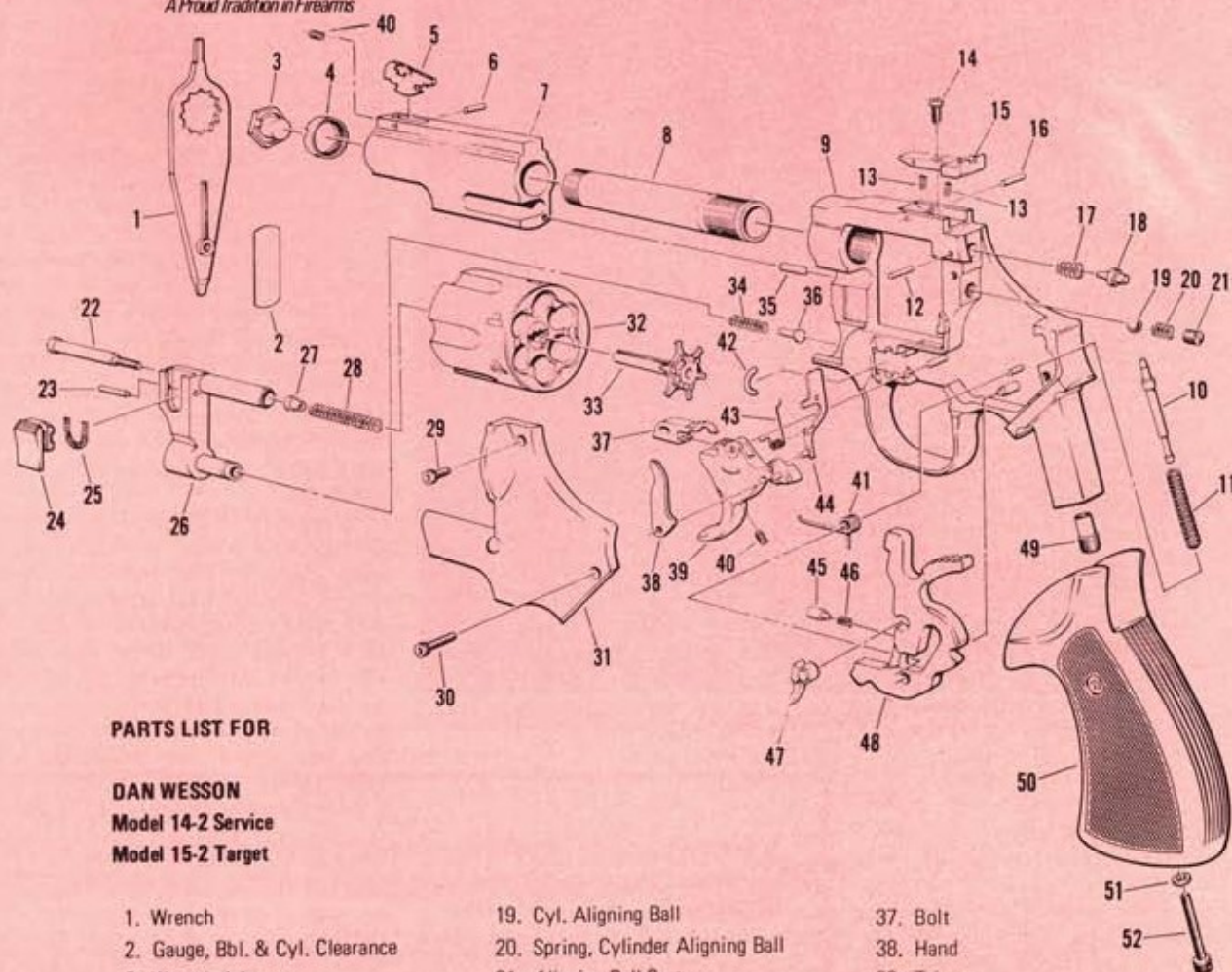
The configuration of the extractor rod (22) on the older model revolvers was criticized by many shooters. Complaints stated that ejecting spent cases, by striking the rod tip with the palm of the hand, resulted in a sore spot or cut on the palm. This would be especially bothersome in any type of competition shooting that re-

Two of the earlier Dan Wessons are shown here; the Model 11 (left) and Model 12.





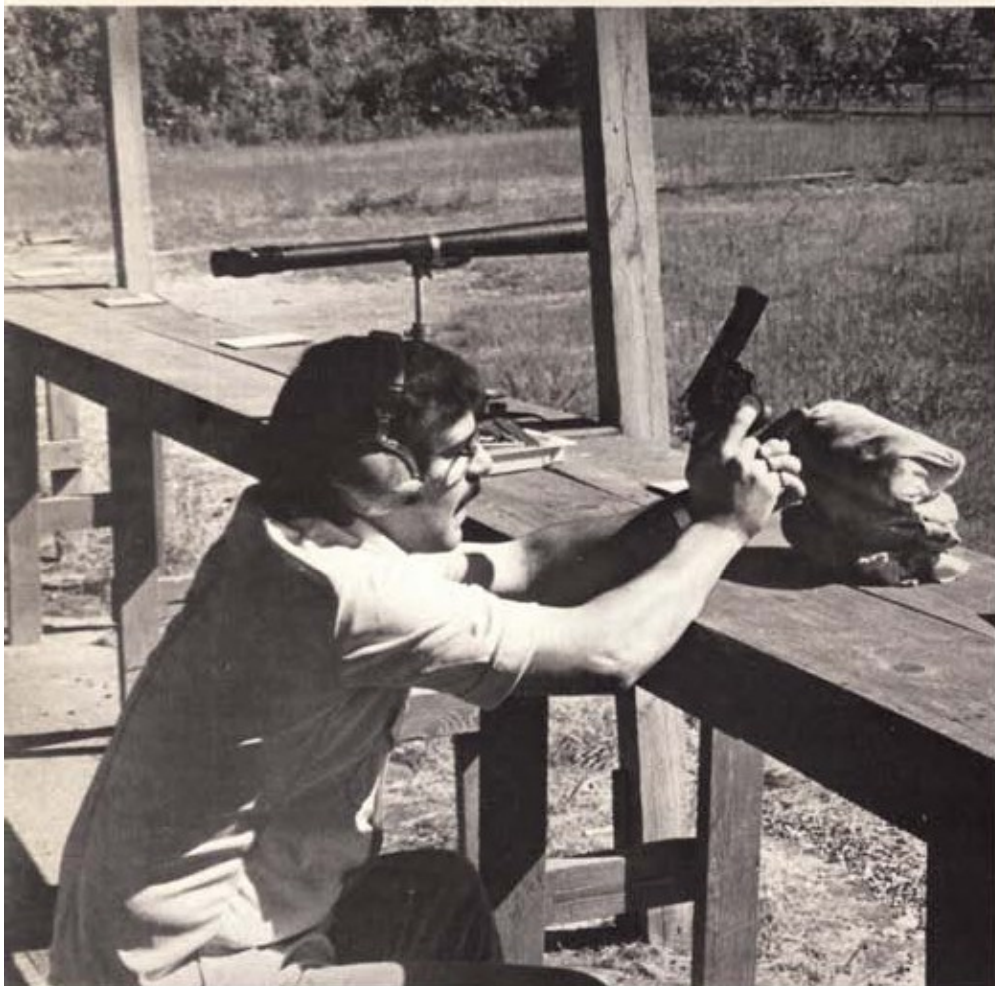
293 MAIN STREET
MONSON, MASS. 01057
(413) 267-4081



PARTS LIST FOR

DAN WESSON
Model 14-2 Service
Model 15-2 Target

- | | | |
|---|------------------------------------|---|
| 1. Wrench | 19. Cyl. Aligning Ball | 37. Bolt |
| 2. Gauge, Bbl. & Cyl. Clearance | 20. Spring, Cylinder Aligning Ball | 38. Hand |
| 3. Wrench Adapter | 21. Aligning Ball Screw | 39. Trigger |
| 4. Barrel Nut | 22. Ejector Rod | 40. Trigger Stop Screw and Adjustable Front Sight Retaining Screw |
| 5. Front Sight | 23. Latch Retaining Pin | 41. Trigger Return Spring |
| 6. Front Sight Pin | 24. Latch | 42. Crane Lock |
| 7. Shroud | 25. Latch Spring | 43. Hand Spring |
| 8. Barrel | 26. Crane | 44. Connector |
| 9. Frame | 27. Ejector Rod Bushing | 45. Strut Plunger |
| 10. Main Spring Guide | 28. Ejector Spring | 46. Strut Spring |
| 11. Main Spring | 29. Short Side Plate Screw | 47. Strut |
| 12. Firing Pin Retaining Pin | 30. Long Side Plate Screw | 48. Hammer |
| 13. Rear Sight Elevation Tension Spring | 31. Side Plate | 49. Mainspring Seat |
| 14. Rear Sight Elevation Screw | 32. Cylinder | 50. Grip |
| 15. Rear Sight Body | 33. Extractor | 51. Grip Screw Washer |
| 16. Rear Sight Retaining Pin | 34. Bolt Spring | 52. Grip Screw |
| 17. Firing Pin Spring | 35. Shroud Locating Pin | |
| 18. Firing Pin | 36. Bolt Plunger | |



Nearby range offered author an opportunity to test a Model 15-2.

quires many rounds of ammo to be fired. The possibilities of a replacement rod were examined, with a larger button-tipped rod being selected to replace the smaller knurled one. The button-tip offered more of a surface to push on with the palm, relieving the soreness encountered with the previous type.

The lock-up of the crane and cylinder by a latch, near the barrel/cylinder gap, was, in the earlier models, accomplished by using a thin, oval spring placed under the latch. The spring exerted upward pressure on the latch to lock it into the frame. However, the lock-up was unsatisfactory. A round spring replaced the oval type, correcting the problem to an extent. A bit of play was noticeable and another course was taken. A longer spring (25) inserted under the latch in a U fashion was tried and found to exert sufficient pressure to insure the tightness desired. The U spring has since been utilized on all Dan Wesson revolvers.

The original cylinder latch (24) was rather large and saucer shaped, with serrations in the dip or curve. This configuration tended to imply that it should be pushed in, rather than down. The newly designed latch is smaller, with the serrations

placed on the top edge, making its movement more obvious. The placement of the latch was disliked by some and cursed by others, but aware of the frailties of the conventional revolver design, Dan stuck to his guns by continuing to locate the latch forward of the cylinder.

There were no major changes to the external styling at this point. The side-plate was modified slightly for production reasons but of no real advantage to the shooter. The side-plate was originally of a one piece casting with the cylinder lug being an integral part. The new side-plates were being made with a recess or hole incorporated into the casting. The cylinder lug was then placed in the side-plate at the plant by a press-fit.

For a short time the Dan Wesson had a replacement grip made of Powerwood, a plastic of some sort with the look and feel of wood. While at the plant I put a pair of these on a gun and was amazed at its almost identical resemblance to wood. They felt pretty good, with the exception of the sharp-pointed checkering that dug into my finger tips. The Powerwood grips were used as a standard grip for a time, but eventually were dropped and replaced with the real thing.

An oversight in the design of the hand-spring (43) caused it to break off at the point where it entered the back of the hand. This breaking was due to too small a diameter of wire with an insufficient number of coils. A larger diameter of wire and additional coils to the spring cleared up the difficulty. While in the process of correcting the above, a solution to the correct amount of pressure delivered to the trigger by the return spring (41) was also found. By increasing the strength of the handspring the trigger return spring had to likewise be strengthened slightly to balance the springs out to the point of proper operation. With this accomplished, the springs functioned more favorably, improving action performance.

While the 14-1 and 15-1 revolvers were under refinement, steps were being taken to remodel the appearance of the entire gun. The present Models 14-2 and 15-2 were the result. Development of the latest series began in the winter of 1974, but didn't make their debut until early in 1975. The styling was modified to enhance its appearance, yet the Dan Wesson still retains a somewhat distinctive styling of its own.

In order to fill the needs and whims of the shooting public, the barrel shrouds were made in four styles: a standard weight with solid rib, a bull barrel type with solid rib, the standard weight ventilated rib and a bull barrel with the vent rib. All new shrouds come equipped with an interchangeable front sight with a choice of red, white or yellow inserts. The new rear sight is fully adjustable with a white outline.

In redesigning the shroud (7), the foot (on the older version it reached over the front of the crane (26) to retain it) was eliminated, consequently retainment of the crane had to be accomplished within the frame. A piece of steel wire (42) resembling the letter C was used to lock the lower crane leg into the frame. The forward section of the frame, nearest the crane, had to be modified by including a recess to accept the crane lock.

By eliminating the foot on the shroud, the metal used could now be purchased in a cold drawn form. It also made the production of an eight-inch (and longer) shroud more practical. While broadening the available barrel lengths, the new style shroud also enhanced the gun's appearance by eliminating the squared corner just ahead of the trigger guard.

Refinements in the styling were accompanied by further improvements to the action and related parts. The hammer strut, previously made of powder metal, was changed to cold drawn metal. This strengthened the structure of the strut, minimizing wear and possible failure. The crane and latch were likewise previously cast of powder metal but are now made of 8620 bar stock for added strength and also improved bluing qualities of the

metal. The same applies to the locking bolt.

ONGOING REFINEMENTS

As can be seen, the Dan Wesson revolver is continuously being improved. There will be additional improvements to the 14-2 and 15-2 in the very near future. The modifications should be phased into production guns as this article appears in print. The top of the hammer will be lowered to eliminate the possibility of its striking the rear sight. The length of the hammer spur will also be increased to aid in cocking by offering a larger surface area. Unnecessary metal, on the bottom of the hammer, will be eliminated and relocated to the upper portion of the hammer. Increasing the mass at the top of the hammer results in less bounce, better ignition, and greater accuracy capabilities. The upper width of the trigger will be raised nearer the frame to avoid cuts to the trigger finger during extended shooting. The cam shape of the trigger will also be modified to offer a smoother double action pull. The upper crane leg (that which the cylinder rests upon) has been redesigned to prevent the gas ring from cutting into the frame when opening and closing. The gas ring will be taken from the face of the cylinder and placed on the upper crane leg. This change gives the cylinder a full 360 degree bearing surface on the shoulder of the upper crane leg, minimizing wear and maintenance. The conventional place-



The Master himself, Dan Wesson, gives the author a basic course in firearms design and function.

One of several barrel options offered by Dan Wesson, in a wide variety of lengths to meet just about every shooting situation.



ment of the gas ring on the cylinder offered only a partial bearing surface, which had a tendency to increase headspace as the cylinder pounded against the frame and crane during recoil. It would eventually become serious enough to cause misfires, making an overhaul necessary. The ratchet stem and blank (combined form the extractor) have been modified to eliminate the chances of pushing the stem through the blank due to a stuck case(s). The blank has been beefed-up at the rear, providing more metal between its face and the stem tip. A new wrench will be offered, combining the adapter and wrench into a one-piece rig. This will totally eliminate the disastrous effects of leaving the adapter in the muzzle and shooting.

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PART TWO Shooting The Dan Wesson

By MASSAD F. AYOOB

I've been shooting the Dan Wesson since it came out, and grow more partial to it with each passing year. Of course, spending that much time with the piece, I've found not only more to praise, but more to criticize. Fortunately, most of those criticisms can be squared away. Here, by and large, is how.

SIGHTS

My biggest bitch with the gun—and Dan's, for that matter—is the spongy rear sight. You just can't feel the clicks. People who compete with the DW have to count how many flats of the hex screw go around as they make their adjustments. What's needed, of course, is a positive click.

With a little milling, you can get one of the fine Elliason sights into a DW. BoMar has brought out one of their ribs for it; I have one of the first, and it's super. It requires removal of the rear sight for installation, but mounted on a barrel shroud, again allows the quick change back to service, hunting, or carrying configurations. Unfortunately, only a few of the

BoMar ribs have been made at this writing, though the demand has been extraordinary ever since one of the first ones appeared on the cover of Police Marksman magazine.

Apart from the lack of positive adjustments, I like the DW sight. Indeed, I love it to pieces. It's big and blocky and easy to pick up, and the rear sight slants back at the proper angle to shade it from annoying glare.

Front sights? Dan went a long way when he put in the quick-change sight blades. Not that you'll change them every day, mind you. But I, for example, might want the red or yellow insert for carrying in the field, yet favor the white insert for better contrast against the black silhouette in combat competition within fifty yards, and if I want a head hold on that same target at 50 yards, or a 6 o'clock on a bullseye, I can switch to plain black. I like that versatility. I also like the fact that I can install a new insert myself for 80¢. On a Smith, that'd run me several bucks. On a Colt or Ruger, I'd have to send one check to Omega and another to a custom gunsmith.

Indeed, Fred Hill of DWA came up

with a novel approach for us PPC shooters who like the gun but want more precise sight adjustments. One simply takes two Patridge front blades and adjusts the sights so one of them is dead on with the rear sight at 25 yards. Then, install an oversize front blade, and without changing the rear sight position at all, file the front one for the hold you want at 50. Technically, it should be allowed on the competition line, since "sight adjustments" don't specify that you can't swap front blades. Of course not. The people who made the rule books never anticipated the Dan Wesson gun. The same concept has great potential for metallic silhouette handgunners.

That's not the whole answer, of course, because you might still want lateral sight changes during a match, for instance, if you shoot in early morning or late afternoon with strong sidelight and need to move two or three clicks over to compensate.

One solution is Austin Behlert's excellent replacement sight. He sells these units primarily for S&W owners, but now has one for Dan Wesson (\$32 plain, \$35 with white outline). His original intention

was to sell it to DWA, but the two firms haven't been able to get together on price. For the serious competition shooter, I personally think the price isn't out of line, though my own inclination might be to go all the way, spend another \$15, and get a BoMar sight rib. More specifics on this aspect will be found in the accompanying article on "Customizing the Dan Wesson".

I'd like to at least see DWA offer the Behlert sight in the catalog as an extra cost option, as Colt does with the Elliason sight for the Python. People who buy premium guns don't mind another \$20 or \$30 to go Cabin One to the last degree with precision sights, and by being in the catalog, the Behlert-sighted DW would become a factory gun and hence eligible for the Distinguished stage of PPC competition. That doesn't account for many customers—maybe two or three days Dan Wesson production a year at current levels—but discriminating non-competitive shooters would pick up on the option, too.

With the sight that comes on the gun, you can still make positive corrections without sweating the clicks, and maybe even be more positive than the best factory gunsight if you've got a careful touch. Just measure the space between the bottom of the adjustable DW sight and the top edge of the frame with a feeler gauge, and write the measurement down in a notebook for the hold you want at each range you'll be shooting. Then use the gauge on the range, turning the sight down gently and consistently. This is an

old hi-power rifle competitors' trick.

In a fixed sight revolver, if you've got an early Model 11 with the dovetail rear sight, you've got something special. It's the only weapon in its class that qualifies as a fixed-sight gun, yet can be adjusted to exact point of aim/point of impact with the load you want by drifting the blade for windage or filing it on top for elevation. This is why the early DWs were prized by combat shooters in matches that required fixed sight "service" or "off-duty" guns. For the latter, Dan made a special, small production run (of about 20 barrels) in the 2" length instead of the catalog 2½", to meet the match requirements. If you have one, and it's for sale, let me know what you want for it.

HOLSTERS

The Dan Wesson has a cylinder the size of the K-frame Smith, but a frame a bit more like the .41-size Colt. This means that much of the time, you can squeeze a DW into a K-Smith holster of equivalent barrel length without much problem. Personally, though, I'd rather go with a Colt holster, and you'll need the Python size if your Dan Wesson has a heavy barrel. Oddly enough, S&W leather suggests N-frame size holsters for the Dan Wesson, though I frequently carry my DW's in K-size S&W scabbards.

One thing you should avoid: if you're a cop, *don't carry a Dan Wesson in a break-front holster*. The forward movement through the stiff, leather-covered springs can force the cylinder latch down into the

"release" position. Result: you whip your gun out and up . . . and the cylinder falls out. Whattya bet your opponent can stop laughing long enough to shoot you before you get your gun closed and working again?

I like fast, high-security holsters with any police revolver, and this problem with breakfront holsters is no reason for someone who feels like me not to carry a Dan Wesson on duty. I favor S&W Leather's Security Plus holster, which is every bit as snatchproof, extremely fast, and drawn through the top so there's no worry at all about slipping the action open.

With certain shoulder holsters with strong spring clips, I'd worry about the same thing happening when I put the gun *in*. Most like a good conventional holster with the Dan Wesson, and between mid-size Smith holsters and Python holsters you'll find one that's ideal. Safariland makes leather specifically for the Dan Wesson gun.

GRIPS

At this writing, nobody makes grips to fit a Dan Wesson but Dan Wesson (or rather their subcontractors, who only sell to the factory). Pachmayr's rubber version should be out soon, and I for one am eager to literally get my hands on it.

When the gun first came out, the grip stud permitted a vast spectrum of shape options that Dan took full advantage of. There was an almost hot-dog shaped grip at first, which helped the rest of the gun look unconventional and ugly. Dan soon



Interchangeability of the Dan Wessons carries over into the grips. Shown here are the Sacramento, Target and Combat versions that are available; in addition to a smooth target and do-it-yourself blank.

went to the Sacramento style as optional, and thus earned the distinction of offering the finest stock ever to leave a revolver factory. The Sacramento followed the taper-to-the-bottom, finger-grooved, style made famous by Hurst and later Farrant. Also offered was the birds-head Combat grip, unusually long, thicker throughout, and with less pronounced finger grooves.

A lot of DW buffs haven't noticed it, but the dimensions of these grips have changed subtly over the years. The first Sacramentos were a little wide between palm and middle finger joint #2 for some of us, but were trimmed when DW went to the plastic "Powerwood." At that time, wrap-around checkering was introduced. Later, when DW went back to wood, they kept the best of those dimensions and in some models, notably the Combat, trimmed down still more.

It's all subjective. For me, the Powerwoods were just right dimensionally, and I liked that all-round checkering. I'll allow that it did chafe the hand just a trifle when fired with magnums, especially in the Sacramento style, but I thought it was just fine with .38 wadcutters in a match, and the fact that the sharp checkering helped it stay put in magnum combat fire made up for a lot.

It's subjective, but I like the Sacramentos best for all-round carry. They're unequaled for one-hand shooting, and very

good to excellent with a two-hand hold. The longer Combat is ideal for two-hand shooting, but I personally find it a bit too long and straight-angled for offhand and instinct work, and the new ones place the palm lower, emphasizing recoil flip. That may not mean much, however; the Combat dramatically outsells the Sacramento, according to factory sales records, so there's lots of people with different hands than mine, and theirs might be closer to yours. Dan Wesson's "traditional" and "oversize target," now furnished on the guns as standard, duplicate everything that's wrong with conventional revolver grips, and the company knows it and doesn't like it, but that's what the buying public has demonstrated it wants, so that's what comes out of the box. It is to be hoped that our readers are a special segment of the overall market who are into function instead of tradition; you are probably the people who account for the sales of the Combats and Sacramentos in the first place.

From the beginning, Dan has offered an inletted blank to let you carve to your heart's content, and the shape of the DW's grip stud lets your imagination run wild. Paul Brothers of DWA carves a design for his big hands that some might want to consider: he puts a sharp flange over the web of the hand to totally eliminate recoil movement in the fist during rapid hot-

load firing. This also moves the recoil "impact" down away from the sensitive joints that abut the web of the hand, and into the meaty absorptive muscles of the palm.

For concealment, incidentally, you'll be hard put to beat those Sacramento handles; they taper toward the bottom and are thin overall, and reduce bulge dramatically while still increasing control. Remember, these grips cost \$16.65; to put the same style on your Colt or S&W would cost you \$35 for the wood *plus* having to cut away steel on your revolver's frame.

WORKING THE ACTION

This magazine and its sister publication have run a couple of articles on the topic of smoothing the DW action; basically it follows much the same procedure as most other revolvers. All I can say is that this is one of the last guns on which you want to mess with the mainspring. It's especially sensitive to such surgery. Better you should give the present mainspring more room to move in by grinding $\frac{1}{8}$ " or a bit less off the inside of the mainspring housing, giving the coil a little more room to "stretch and get comfortable".

Hammer bobbing ain't a good idea on a Dan Wesson, unless you're going for a DA-only PPC gun that won't be firing anything but wadcutters that you've practiced



a lot with before the match. It takes about a pound off the hammer's impact, which means that for reliable functioning with Magnum loads you'll have to add a pound to the mainspring pressure to balance out. Better you shouldn't bother.

Just put a fine, light polish on the contact surfaces, and on the inside of the frame, where parts will often touch on this piece. Take an eensy bit off the trigger if you like, but for Heaven's sake use a light touch.

When you put a file to the trigger of an S&W, you know you have X-thousandths of case hardening, and if you go all the way through it, you'll hit the soft metal and will have ruined the part. On the Dan Wesson, it's a little more arcane. The trigger is made of sintered (powdered) metal, though it's high density and double pressed for toughness. Instead of true case hardening, the trigger is "carburized," and the sintered metal "soaks up the hardening" like a sugar cube soaking up coffee, 'cause it's porous. Therefore, there's no way to determine just how far the "hardening case" goes. You can't even test it for hardness on the Rockwell scale; sintered metal parts are evaluated on an "apparent hardness" basis.

Since you don't know how much metal you can take off before you're compromising the parts, you'd be better off to have the bearing surfaces of the parts "flash-chromed", which will bring them up to a confidence-inspiring Rockwell C hardness of 74 or so. Armalloy, Metalife, and the Behlert process worked out nicely on guns I've seen and used. You want *hard* chrome, not a purely cosmetic plating.

BARRELS

No question about it, the "QuickShift" barrel feature is a major plus in Dan Wesson desirability. Maybe the biggest single factor. Unless you've got a decent shop and plenty of gunsmithing background, changing tubes yourself on any other gun and still getting the barrel-cylinder gap right would be a *very* tricky thing. This procedure can be done by the rankest novice on his kitchen table in about a minute with a Dan Wesson, and it comes out perfect.

It *has* been slightly oversold, though. There are people who tell you that you can change from four or five barrel groups and not have to touch your rear sight to still be in the black.

Folks, I've been shooting a lot of Dan Wessons for a long time, and I've never found two barrels of any length that would shoot to the same point of impact without



The Dan Wesson may not be the most concealable gun but it fits well in a number of holsters. This is the Bucheimer Concealer made for the S&W 19. Heavy barrel or ribbed models require Python holsters.

changing the sights. I *do* find that if I take a barrel off, for cleaning or whatever, and put the same one back on, my zero is still rock-solid where it was before. On a new gun, you can change your point of impact an inch or two by taking the tube off and then replacing it, but once the parts have been seated (a box of Magnums should do it, or a couple hundred rounds of .38), the variance will be a fraction of an inch or less.

It would be nice if you could change the barrels without having to change the

sights. But why should you? It's not like you had a 35mm SLR camera system where you might use three or four lenses for every roll of film you took. If you carry your DW on duty with a 4", you'll sight in for that and leave it. If you slap on a 6" or 8" for hunting, why, you'll resight in just as you would when changing guns and loads with another brand. I work off four Dan Wesson frames, and I use the guns a lot, and I switch barrels maybe four times a year, if that. I always sight in again when

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Paul Brothers, chief engineer at Dan Wesson, tries out a scoped version for long range accuracy.

PART THREE

Customizing The Dan Wesson

By MASSAD F. AYOUB

CUSTOMIZING a Dan Wesson .357 is going to center on a handful of things: action design, sights, and finish. Though the guns were very briefly made with a satin nickel finish. (If you have one, for God's sake get it insured and hang onto it), almost all of them have come out in blue, and Dan Wesson would rather die than make one in stainless. After some of the problems the other manufacturers have had with that material, we can understand him, if not totally agree.

Since we're talking about finish, let's stay with that, because the DW revolver is perhaps the prime candidate for a sophisticated gloss. Not on the outside, because the DW has one of the more finely polished finishes in the industry, but some people think that because certain action parts are sintered (powdered) metal, they're too soft to hold their configuration, and need to be hard-plated to stand up. In fact, almost as many Dan Wesson buffs feel that way as don't.

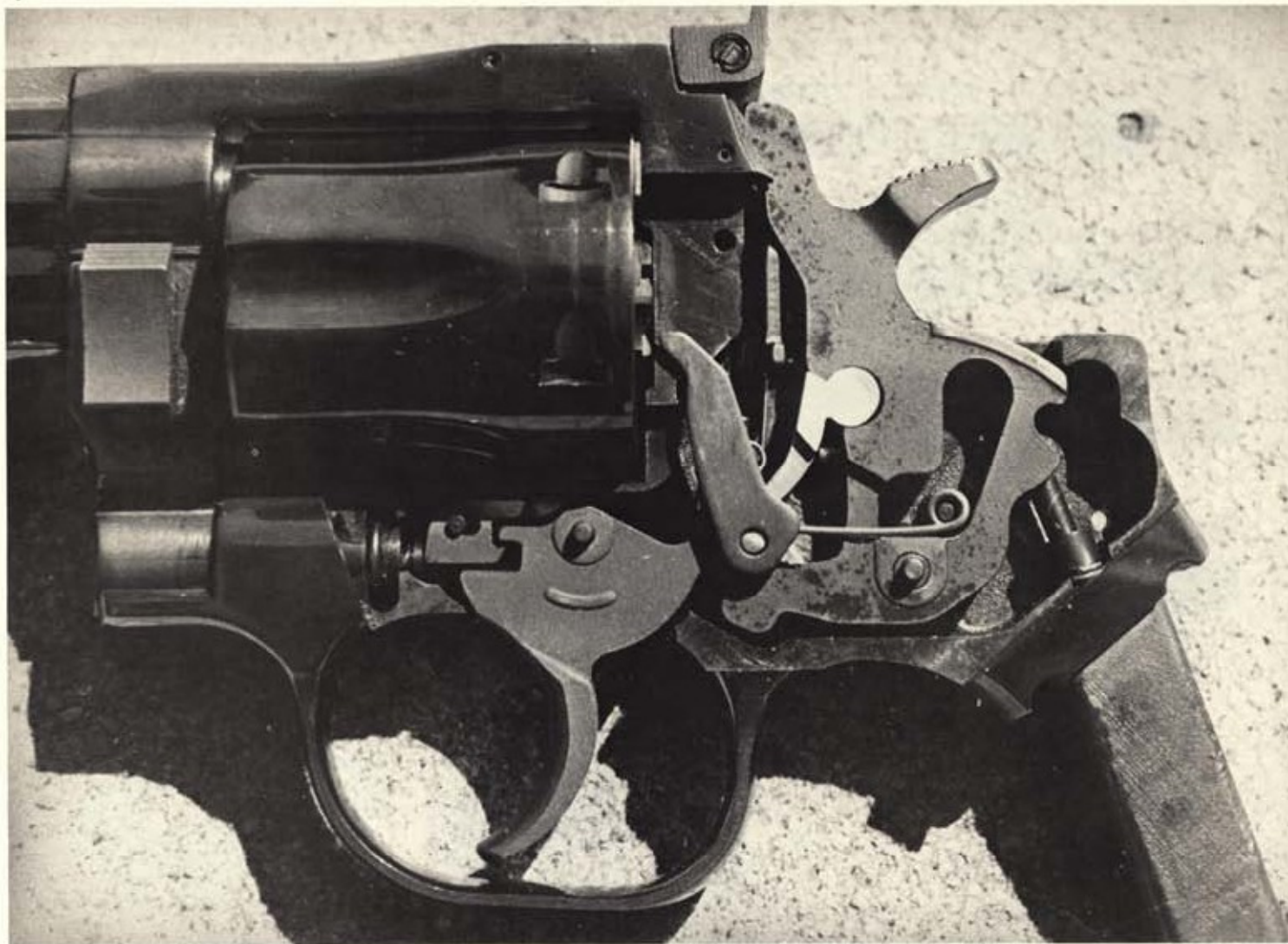
I'm a fence-sitter. I've had some Dan Wessons that did me fine as they came out

of the box through heavy shooting, but I also have to admit that the two DWs I shoot the most have Armalloyed or Metalified innards.

Let's take a rundown on the people around the country who are now doing custom work on the Dan Wesson gun. From their judgments and experiences, perhaps you can mix your own needs in to determine who'll do the best job for you.

Jim Cirillo used to do the best Dan Wesson actions anywhere. He told me that he isn't available commercially anymore. I have one of his guns that I waited a year for, and it was worth it. He is perhaps the only smith who has mastered a technique for cutting down Dan Wesson springs without losing Magnum reliability, and it shows in his actions, which are ultra-light and go down into the five-pound range double action. My Cirillo Dan Wesson, a 4" fixed sight, will bust .357 caps all day, yet has a pull like a PPC gun. The internal parts are plated; it has Cirillo's carefully-cut trigger return spring and mainspring; and Jimmy trimmed the hand and rounded the left edge of each ratchet to change the two-step feel of the Dan Wes-





Close-up of Model 15-2 action. During the years, just about every action part has undergone modification for a smoother, more reliable operation.

son action into a one-stage pull that you can still "trigger-brake" if you have a subtle experienced index finger. Jim is mainly a Smith man, and his Dan Wesson comes out distinctly "Smith & Wesson-y", but you should remember that Jim took one of the first Distinguished Police Combat awards, and earned himself a reputation as America's top snubby shooter, with Dan Wesson's he customized to this formula.

When a shooter wants the S&W-like straight through pull, with only a click instead of a felt hesitation when the hammer reaches the "let's go" point, there are other ways to get it. Paul Brothers of DWA would rather flatten the top of the hand. He says it does the same as Jimmy's version, but doesn't sacrifice the solid-pre-timing of the cylinder. Of course, since Paul doesn't like to mess with the main-

springs, his approach won't quite give you the minimum trigger pull, either.

When we say "pre-time," we mean that the cylinder is locked into position before the hammer begins to fall during double action shooting. The Colt Python, by contrast, doesn't usually pre-time: the Smith & Wesson may or may not depending on the production run. The Dan Wesson almost always pre-times out of the box.

What this means is that the last, crucial few ounces of pressure on the double action trigger don't do anything but drop the hammer, and you don't have to worry that a sudden "stacking" of pressure to finish turning the cylinder will make you put too heavy a pull on the trigger and jerk the shot. Amateurs criticize the Dan Wesson because, they say, "There's a little hitch there just before it goes off." Double action combat masters, who don't jerk their triggers back all at once, recognize this as a two stage trigger that allows you to rotate the cylinder with the first part of the pull, then finish the squeeze as if the gun had

been cocked. It makes for ultra-precise DA shooting.

Ironically, there are some who say the Dan Wesson is great single action, but blah in the DA mode. It does indeed have a nice, crisp SA pull, but anyone who thinks it isn't controllable double action has spent too much time with automatics to understand how the DW works. That, or they've been working with very early DWs, which had most of the pressure at the beginning of the ultrashort pull, and "whiplashed" wildly. A complete set of new parts will fix up those old guns.

There are several custom gunsmiths who will do a fine action job on the Dan Wesson, and maybe add some goodies besides.

Austin Behlert (717 Lehigh, Cranston, N.J. 07016), is partial to the Dan Wesson, and so, he says, are many of his customers. "It's basically a fine design. I would say it's one of the guns to beat in the field right now. The variations of barrel length are an unstoppable feature. They're going

Jim Cirillo with his customized Model 12 that won him the N.J. State Championship. Note painted sights, protective front wings.



Model 14-2 Service revolver in .357 Magnum with fixed sights. Four barrel lengths are offered.

20 clicks per revolution in elevation, 16 per revolution in windage, for an ultra-precise lock on the farthest target. A Behlert sight on a Smith gives you an amazing 237 clicks of elevation; it's somewhat less on the Dan Wesson because the elevation screw is so placed that to get that much height, the screw would have to go down into the cylinder. On a Smith, that screw is well back into the beefy part of the frame.

Andy Cannon, PO Box 632, Center Harbor, N.H. 03226 is the only guy I've run across who offers a full PPC conversion of the Dan Wesson. In addition to slicking the action (\$25), he'll put protective wings on a Patridge front sight (\$10), and for another \$5, he'll add a "trigger-ease" of soft material at the back of the trigger guard, an option that's strictly for DA-only gunners. His whole "Cannon PPC Dan Wesson" package goes for \$40 ... a bargain.

Included in the action job is a general honing, and a smoothing of the edges on the trigger. Like the S&W Ranger trigger, which resembles it, the one on the DW can pinch a bit.

Andy has his own approach to the mainsprings. The trigger return is modified for lightness. As to the mainspring, Andy takes one of the experimental production

for quality."

Austin believes he can improve on that, though, in several ways. He does a complete action job for \$28, which he says will make the DW as smooth as any Smith. Though Austin is not famous for quick deliveries, he says the DW job is so easy he can turn the gun around in a short time. For refinishing, which he's pushing right now, it'll be four to six weeks before you get it back.

Austin has two new finishes, applicable to any gun but especially nice in the Dan Wesson, which responds so well to plated parts. His stainless chromalloy process gives the entire gun the appearance and rust-resistance of stainless steel, tightens tolerances very slightly, and gives the parts a slicker feel. The process is \$75.00. To that, Austin likes to add his new microfinish, "a clean, ultrasonic mechanical hone that removes no material. With the combination of the stainless chromalloy and the microfinish, I can reduce trigger pull a third or better by reducing friction between parts," Austin promises. Microfinishing of all internal parts plus bore and cylinder goes another \$60.00.

Of major interest is the sight we mentioned before. The Behlert sight give you



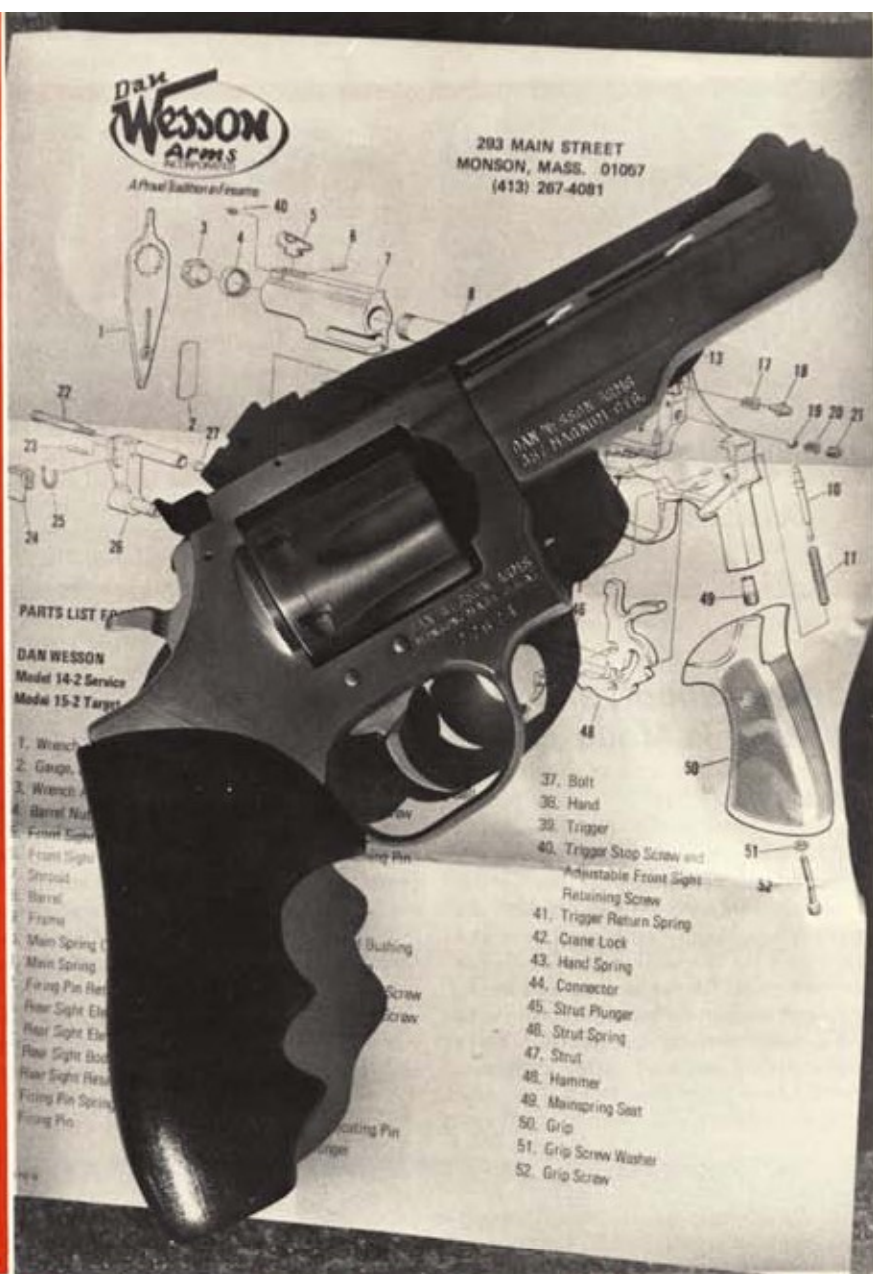
For a slicker action, author recommends nothing more than a little honing and application of molybdenum disulphide between the parts.

run the factory did a couple of years ago that turned out to be too light for reliability, and adapts it by altering the spring guide and putting the hole higher, tightening the spring for adequate compression with much lighter tension. This is for the PPC guns only, of course. Figure 10 days to 2 weeks, and allow \$5 or \$6 for parts.

Gregg Roberts, very well known on the West Coast for his PPC S&Ws, does only basic slicking on the Dan Wesson. A job goes in the \$20 price range, turnaround time is quick, and though I haven't tried one, he's said to be excellent. His address is Professional Police Firearms Service, Box 1017, 305 Soquel Ave., Santa Cruz, CA 16343.

The people at Dan Wesson are mixed as to who does the best custom action on their gun. Dan himself has very nice things to say about the Cirillo job. Dick Rosenfeld, vice president of the firm, says the best he's seen is that by Cleveland Bluing, 1024 E. 185th St., Cleveland, OH 44119. DW exec Fred Hill, an ex-cop and PPC shooter, vows that the best available custom job is from Jim Clark, 7424 Broadacres Rd., Shreveport, LA 71109.

Which would I choose? I'm very partial to my Cirillo Dan Wesson, but Jim says he's not able to do them on a commercial basis, so your best chance would be to corner him at a PPC match (he makes most of the big ones, especially in the northeast) and beg him on bended knee to take your DW home with him. If he does, specify whether you'll use the gun with hard-primer loads, or with wadcutter exclusively.



Factory does not offer plated guns and those who want something other than blue must have it done. This is the hard chrome Metalife finish.



Paul Bothers carved this recoil-absorbing grip from walnut blank.

I've shot the Cannon PPC Dan Wesson, and it shoots like a dream. Andy, like Jim, seems to have licked the spring problem (at least in a wadcutter gun) and made an easy-to-shoot gun easier to shoot well.

I haven't tried the Roberts or Cleveland Bluing actions, but both come highly recommended. Jim Clark is well nigh incapable of making a bad gun, and if his S&W and Ruger custom revolvers are any indication, you won't go wrong trusting your Dan Wesson to him.

Of course, you can always tune it yourself. Just go very easy on messing with the springs. Flash-chroming the parts with a hard, slick surface can only help. How necessary it is, I'm not sure: some 'smiths do tell you that the powdered metal parts are too soft and let the gun go out of time too easily. When a Dan Wesson is out of time, I usually find it's because the top left sideplate screw has backed out a little. 8

or 9 times out of ten, a quick turn with the Allen wrench puts ratchet and hand back into a perfect, pre-timing relationship. And for a "home-slick" action, a little molybdenum disulphide between the parts along with very conservative honing is generally all that's required.

The Dan Wesson is an easy gun to get to know, inside and out. The beginning revolversmith could scarcely ask for a more forgiving "teacher" to learn with, though it does get a little pettish if you mess with its springs and take too many liberties with files.

The Dan Wesson is a fine, highly accurate weapon with performance at the top of its class in everything you'll use a DA .357 for. There are few people who'll find anything on it to improve. Those sophisticated shooters who would like custom touches would do well to contact the people described above.