

Chapter 3

A MATTER OF PROTECTION

Proper Care Of Your Tools Is An Aid To Efficiency And Protects An Important Investment

ONE OF the first truths the newcomer to home gunsmithing will discover is that quality tools are not cheap.

Even though top-quality tools eventually will pay for themselves, both in longevity and the quality of the work they are used to turn out, one can quickly expend hundreds of dollars for only a few of the varied tools needed in everyday gun work. In time, this cost can easily multiply into several thousand dollars, especially when one enters the various phases of gunwork requiring highly sophisticated precision tools.

From the moment one purchases his first good — and probably expensive — tool, he should begin thinking about its care if he wants this particular purchase to last for many years to come. Giving a few minutes consideration to a tool

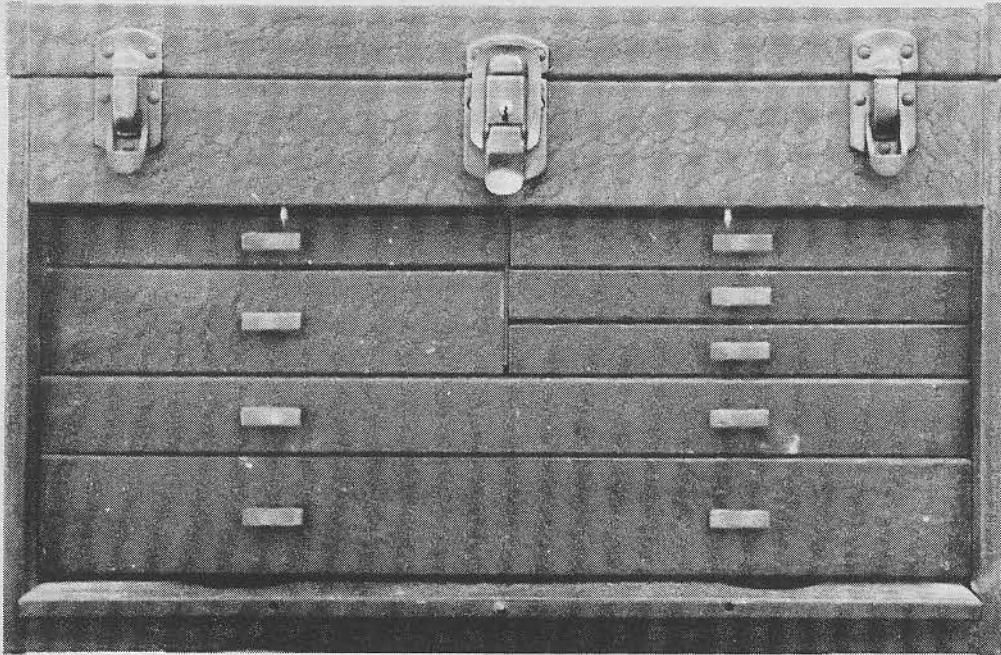
can prevent it from becoming rusted, nicked, dulled or just plain beat-up.

Naturally, there are some expensive tools that will tend to wear or dull with age. Chisels may become dull, requiring frequent sharpening, resultantly wearing down the length of the blade; files will become dull through natural use and eventually must be relegated to either the trash box or set aside for other purposes. High-speed drills also will become dull with extensive use and must be sharpened, thus shortening their length. But this all takes place over a period of years, not in a few weeks or months.

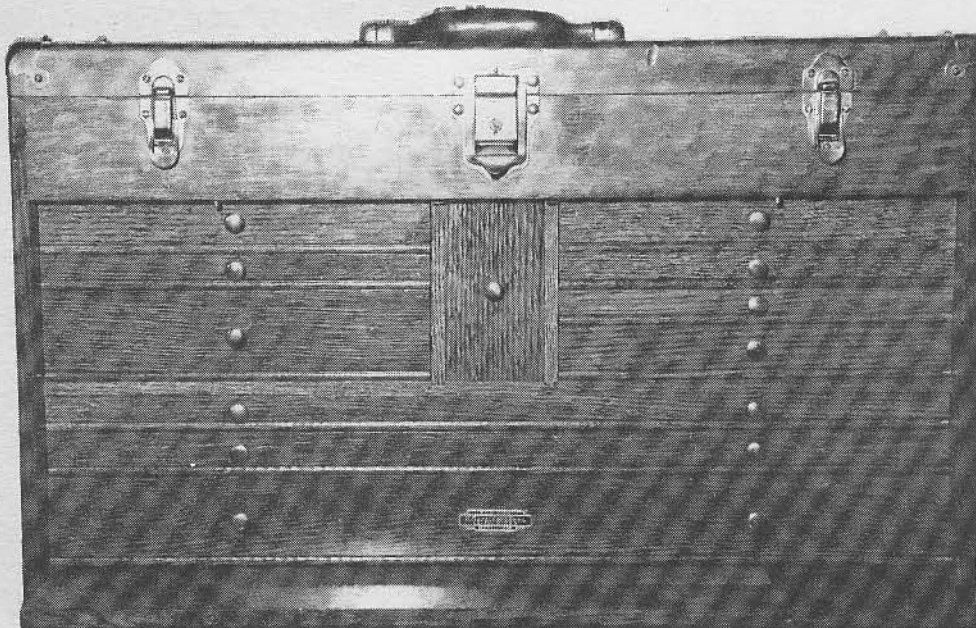
So what should the newcomer to gunsmithing do about caring for tools properly? The answer to this is simple. One can protect them from misuse and possible abuse through negligence by checking each tool periodically for dullness,

After completing a gunsmithing job, the author sorts out his tools and replaces them in cases specially designed for them. He insists that continuing care of implements of the trade will pay dividends in continued long use.





Popular with most working gunsmiths is the seven-drawer Kennedy tool chest. In addition to the drawers, it also has a large storage space in its top section. It is ideal for storing precision tools. (Below) Author considers the H. Gerstner & Sons solid oak machinist's tool chest top of the line. No longer made, it is difficult to find today and is quite expensive. The model illustrated has eleven large drawers.



rust caused by friction or rubbing against other steel tools.

The first consideration one should give his tools is a proper place to store them when not in use. This should be located in the vicinity of the workbench where each and every tool will be handy at a moment's notice. This storage area can range from a common toolbox with trays to a deluxe Kennedy seven-drawer model or even an elaborate — and costly — solid golden-oak eleven-drawer machinist's chest from H. Gerstner & Sons. This type of chest no longer is made, but they can be found at gun shows and swap meets. Or one may prefer — providing he has a large array of tools — to go the route of the larger roll-away tool chest which can have any number of drawers, depending upon which model one prefers. This type of chest also features a large storage space, usually at the bottom of the roll-away. Such models usually begin in price at around \$300.

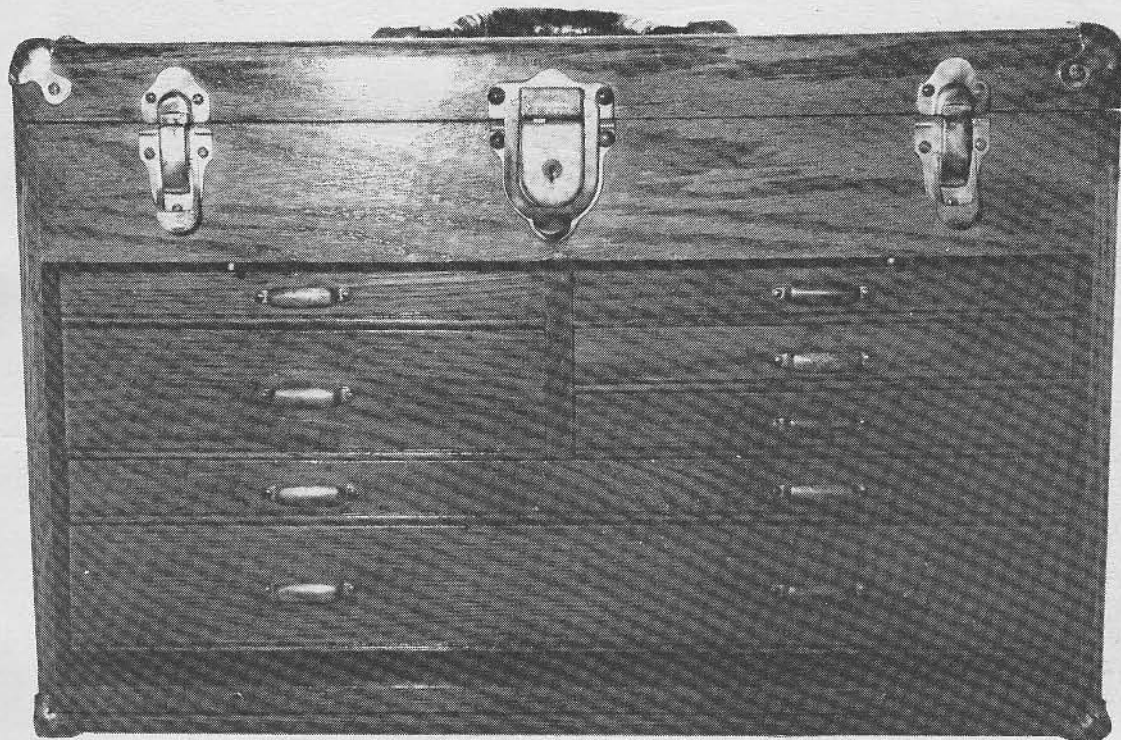
Should one want to add the various accessory tool chests to sit atop the basic roll-away, then the price can escalate to as much as \$600 — or more — for the complete stack.

Should you already have a good toolbox or roll-away as an ideal place to store your tools, even this is not enough to fully protect your tools; this is especially true of those having teeth or sharp edges. After all, one doesn't just throw a bunch of expensive die sinker's files or equally expensive high-speed or carbide drill bits into a drawer and let it go at that. These tools must be protected, one from another. A hardened steel file being thrown into a drawer with a set of micrometers or good chisels means ultimate damage to something. Save your files for actual work on the bench; don't let them do a harmful job on your other tools inadvertently.

Some years ago, while thumbing through the gunsmith's Dream Book, the Brownell's catalog, I spotted a new product that they were offering client gunsmiths. Listed as the Celluplastic Shop Assortment, this kit consists of twenty plastic tubes varying in size from three-eighths up to seven-eighths inch in diameter and eighteen inches in length. Furnished with these tubes are some two hundred plastic caps, which are assorted to fit each of the tubes furnished.

These plastic tubes may be cut with a pair of scissors to

Like the Kennedy model, this Gerstner tool chest features seven drawers and a large storage area under the hinged lid. Either of these styles Bish considers ideal for safe, locked storage of costly precision tools.





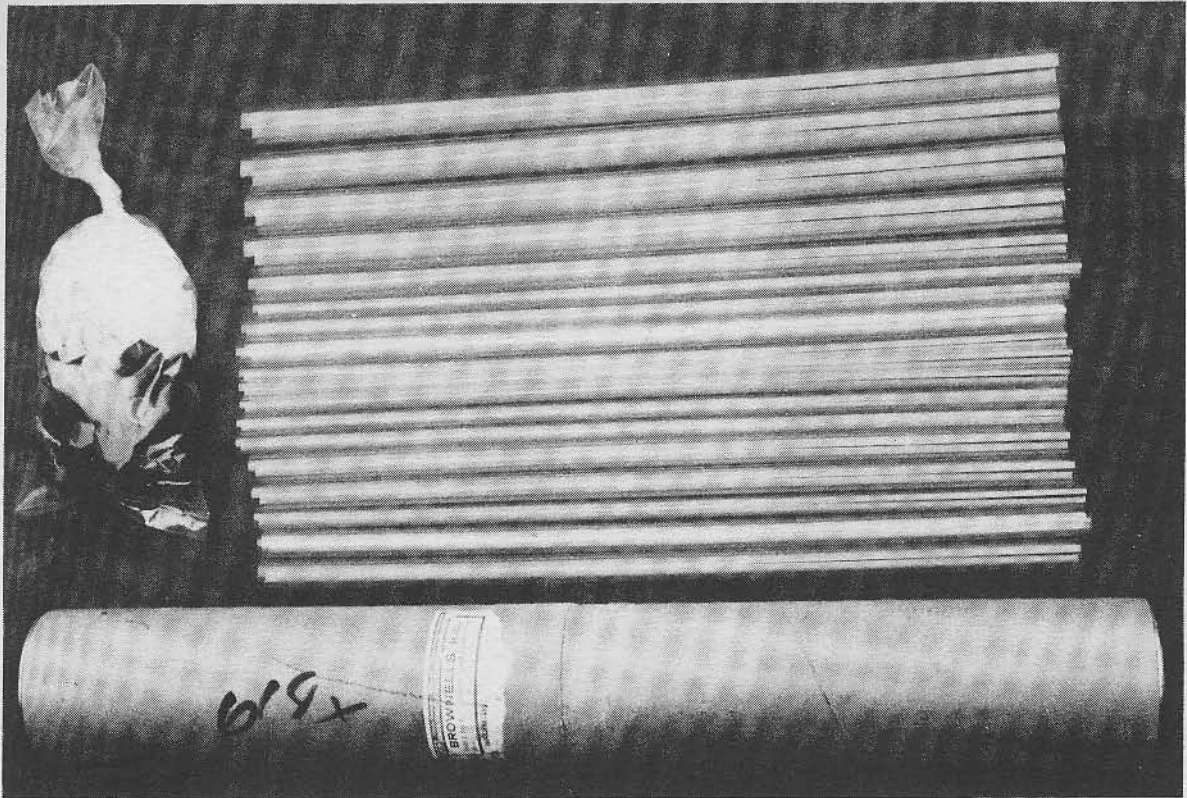
While roll-away tool chests are available in a variety of styles, this is the type preferred by the author. It features nine roomy drawers for storage of costly tools, gun parts and materials.

the length required, the caps inserted into each end of the tube. The result is a protective, dust-proof and friction-free container that is certain to fully protect such tools as taps, drills, files, reamers, scribes and a myriad of other tooling having diameters of up to seven-eighths inch and a length not to exceed eighteen inches. These tubes are of transparent polyethylene so that the proper tool in the proper size can be selected at a glance.

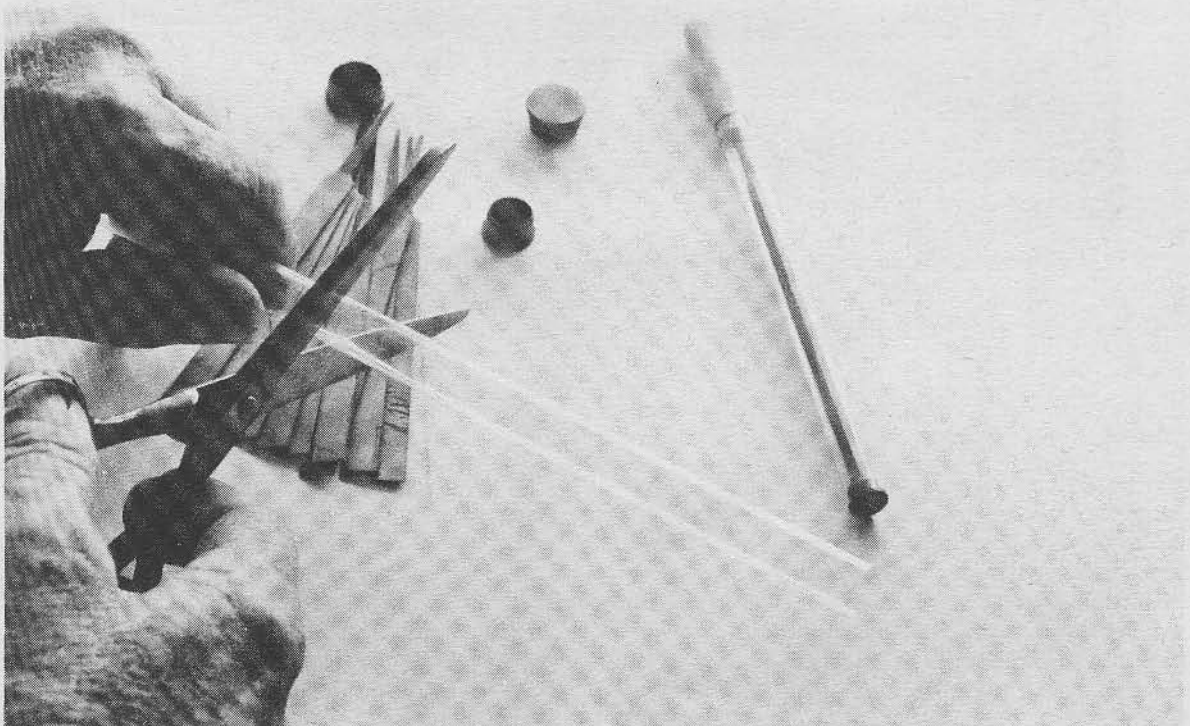
In addition to tools, I have found these tubes to be unex-

celled for maintaining expensive mink hair touch-up brushes; the bristles thus can never be bent or misshaped through friction with other materials. These tubes also can be ideal for storing expensive sight base files, extra-narrow pillar files, fine-toothed round files, ad infinitum.

I have found it best to dedicate each drawer of both my tool chests and the roll-away to accept specific tools. I have one drawer set aside for nothing but storage of high-speed drills, gun taps and dies and drill and thread gauges.



The celluplastic assortment from Brownell's, which is described fully in text, can be one of the best investments by craftsmen for protection of his tools against rust, dust and friction. (Below) The heavy plastic tubes can be cut to any length up to 18 inches for tools to $\frac{7}{8}$ -inch in diameter. Plastic caps are furnished.



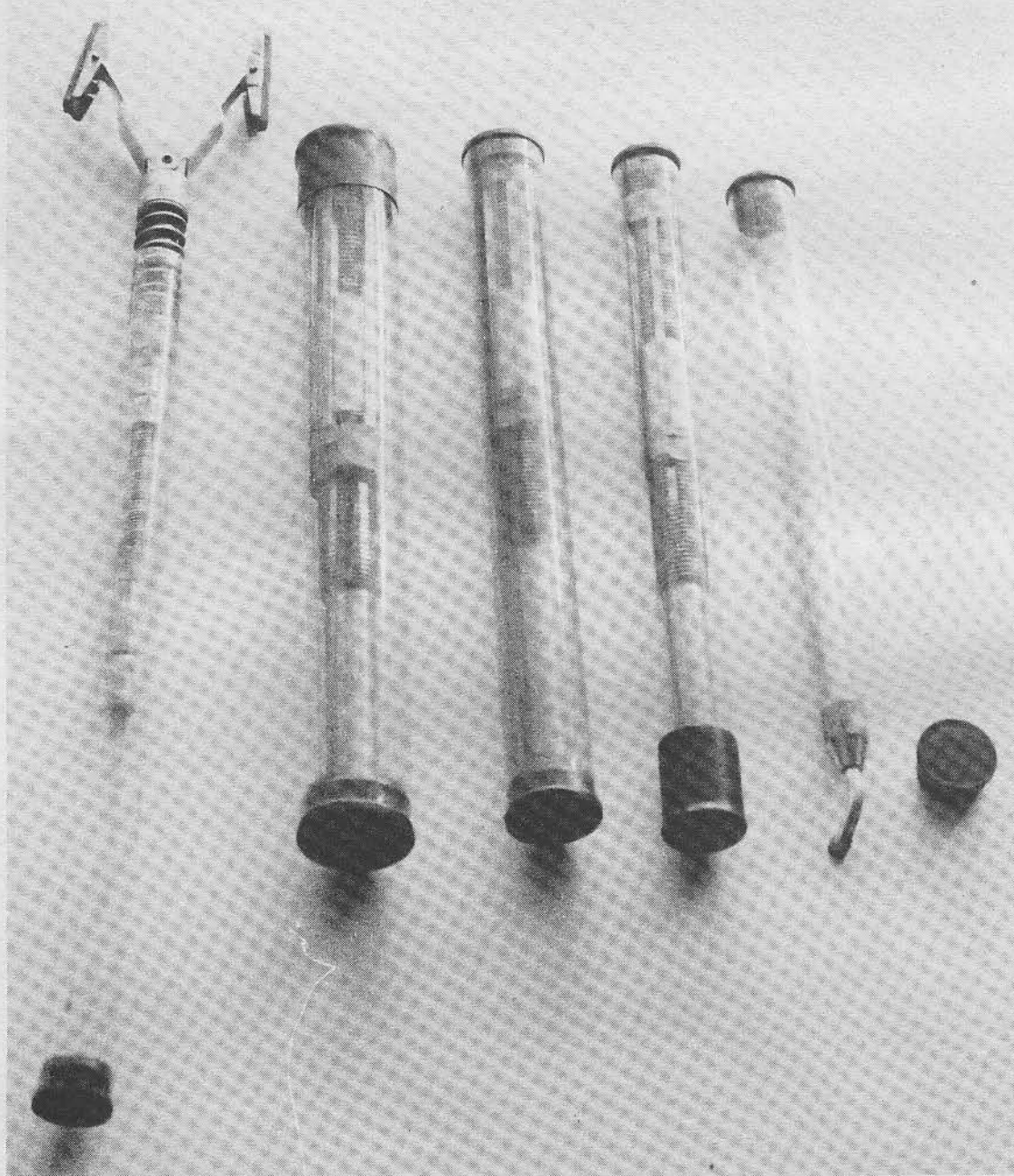
When a drill or tap of a particular size is needed, I know exactly which drawer to open. Another drawer is reserved strictly for my chisels. Each chisel is laid in place carefully so that the sharpened ends will not rub against any material that might dull them. Another drawer contains nothing but precision instruments, such as dial calipers, micrometers, vernier calipers and tools of that nature.

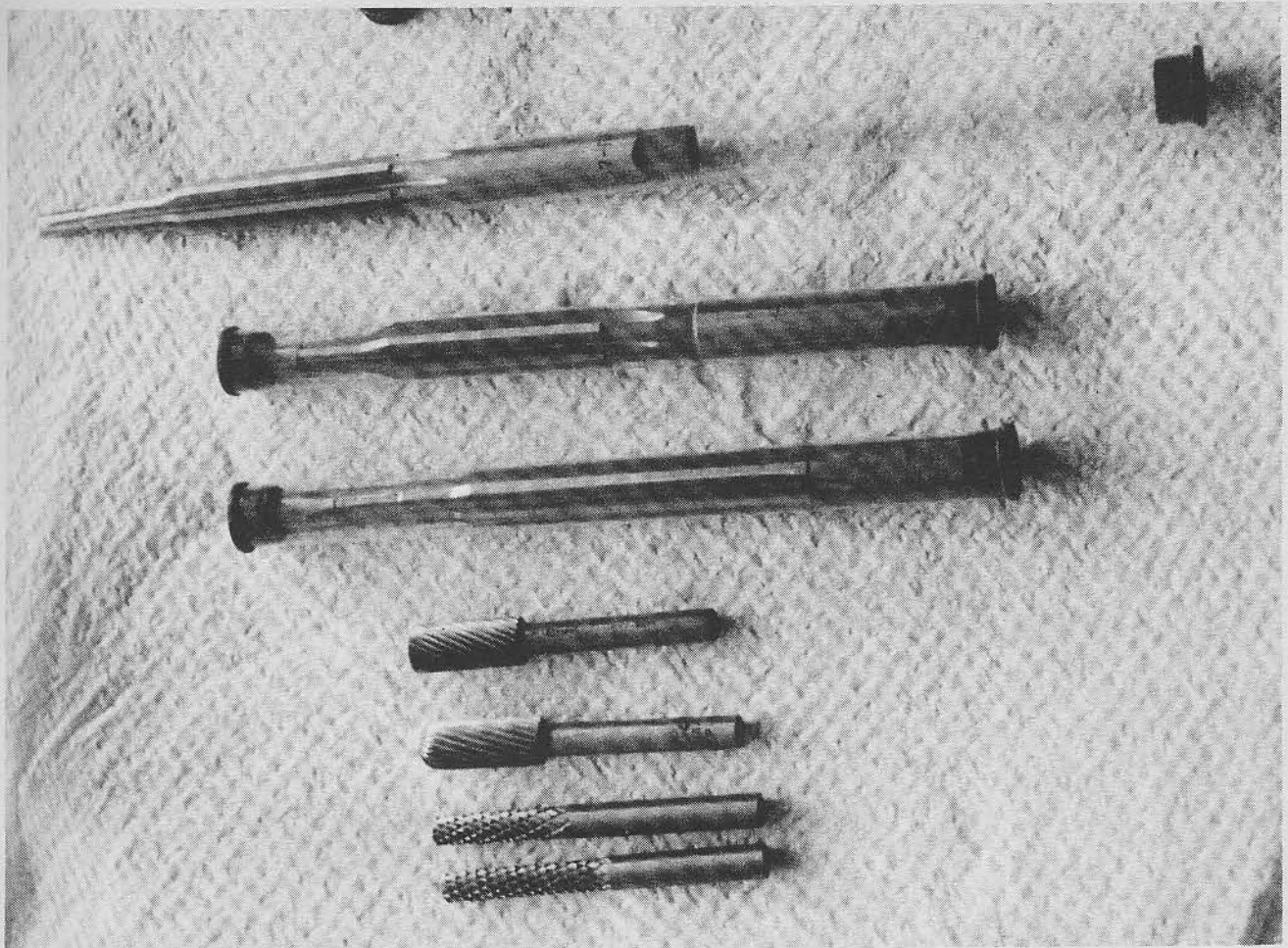
The basic reasoning behind this is that I detest having to

look all over the shop to find some elusive tool. With the system outlined, I know exactly where each tool is located and can have it in hand in a matter of moments. This method of organization saves a lot of frustration and lost time, both of which cost the working gunsmith money and gray hair!

As you will find repeated throughout this book, tools are of the ultimate importance to the professional gunsmith

Costly precision tools such as these shotgun choke reamers and the hone can be amply protected when they are inserted and stored in the plastic tubes that have been cut to the proper length.





Carbide rotary files and chambering reamers are costly and thus deserve the best of treatment for preservation. These are receiving such treatment, being encased in the plastic tubes and the ends plugged with furnished caps.

and the beginner alike. Without them, the gunsmith would feed on beans three times a day instead of the occasional hamburger. The beginner would be better off making pottery or taking up tatting as a hobby. The tools make the big difference!

Once in a while of late, I have brought myself to attend a so-called flea market or swap meet, or even a so-called gun show that as a rule falls into one of the two previously mentioned categories. In these forays, I occasionally run across acceptable and expensive tools of bygone years. Early American, English and German-made tools are sometimes quite desirable due to the quality of their materials

and craftsmanship. I have been fortunate enough to acquire such items as fine, beautifully made ball-peen hammers, bench saws, vises, all-steel machinists' squares and an assortment of other desirable tools which, if they were made today, would cost a young fortune.

For the most part, these tools required nothing more than thorough cleaning and sometimes a light polishing to bring them back to as-new condition. Admittedly, tools of this quality and age are hard to find, even at flea markets, because there are other guys just like myself who fully appreciate their worth and snap them up quickly. As a rule, tools such as these can be bought for little or nothing,



Drawers in your chest should be arranged so related tools are at hand at a moment's notice by opening only one drawer. Drills, taps, assorted dies, as well as sizes of screws are stored in this drawer.

depending upon who is selling them. On the other hand, there are some sellers at flea markets who ask a fortune for just about any piece of junk! For the most part, the tools described were manufactured from the 1890s through the turn of the century, when quality of craftsmanship was at its prime.

Like anything else that is worthwhile, tools become a big investment. Like the finest automobile or television set, they require proper care and maintenance if they are to be expected to perform the job for which they were designed. An occasional light oiling of bare steel, unplated tools prevents rust and discoloration. Precision tools, such as micrometers, must be kept spotlessly clean to assure their accuracy. Rust on the teeth of files can render them ineffective and dull in short order, rusted drill points cut jagged, untrue holes and the same is true for taps and dies that won't cut clean threads if rusted.

In addition to toolboxes, chests and roll-aways, one should, if at all possible, have various racks, shelves or doored cabinets located in, around or above the workbench. These spaces might hold the tools that are used most often. This would include screwdrivers, files, pliers

and snippers, hacksaws, small bench anvils, pin punches and any number of other items that are in constant use each day. Every bit as important to the gunsmith as his tools are such items as oils, gun greases, stock waxes, stock finishes, fillers and similar concoctions that might fill a nearby cabinet outfitted with doors. Metal-coloring agents such as gun blues for touching up worn spots, solder blackeners, plum brown solution and other acid-type preparations should be kept in a nearly airtight cabinet, as these can cause tools to rust in just a few hours if exposed to fumes they tend to emit. Thus, it is best to store preparations such as these far away from your tools; the same is true for soldering acids. Never attempt hot bluing in a shop full of tools — you'll rust 'em.

Some of the old-timers in the field of gunsmithing have, on occasion, been accused of giving their tools the diaper treatment, treating their tools as though they were infants of the family. This may be true to a degree, but I have found that these old-timers are the gunsmiths who turn out work that can only be judged as superlative. They are craftsmen of the highest order and the care they give their tools reflects the care they put into each and every job they turn out.

The author favors one of the larger drawers in roll-away tool chest for storage of such electric handtools as his Dremel Moto-Tool, an engraving tool, speed indicator and the checkering tool with which he does most stock work.

