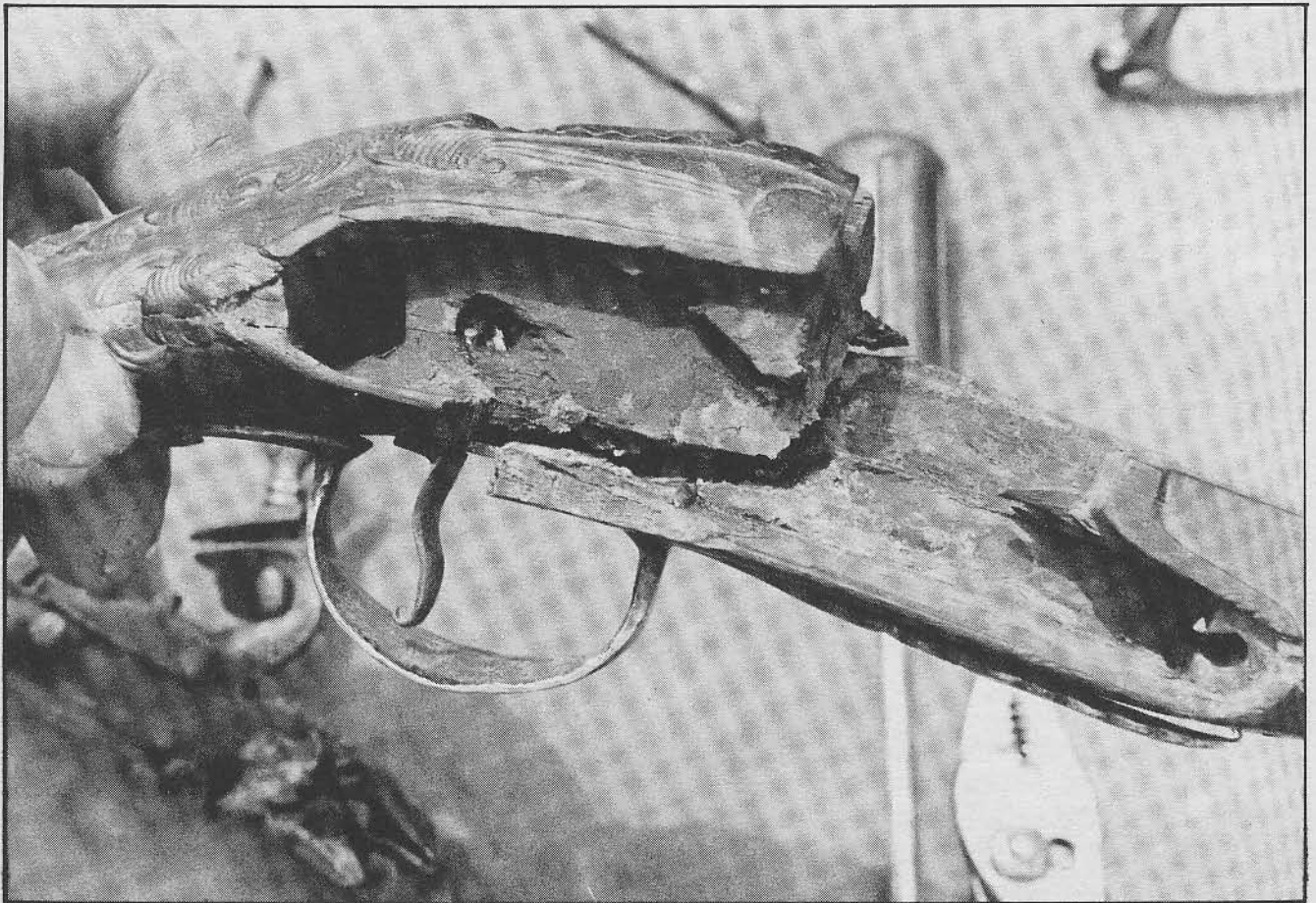


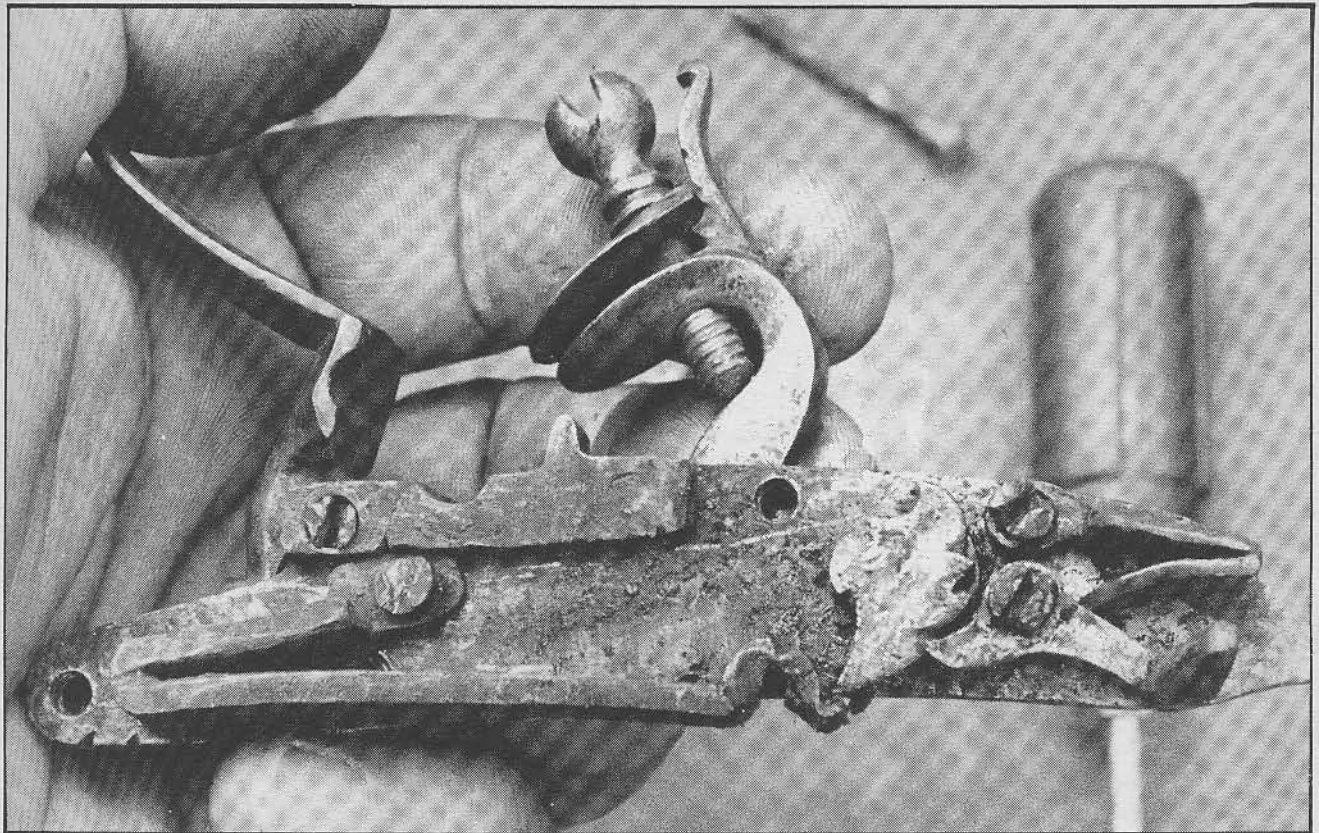
Chapter 17

REVIVE & RESTORE

*Here Are Practical Methods Of
Restoring Junk Guns To Collector Value*

This virutally destroyed relic appears to be beyond help, but in the hands of a good craftsman, much can be done to restore it to some semblance of its original form. The author outlines some of the do's and don'ts of restoring.





The rusted and crusted inner parts of a lock such as 18th Century flintlock can be cleaned and repaired in such a way that the device is in a nearly perfect state.

IN MANY an attic and basement, there reposes one or more aged arms. Contrary to the supposition by many collectors of antique arms that the so-called sleeper is a thing of the past, almost every week some new discovery is made in the way of a highly valued antique rifle, pistol, shotgun or edged weapon.

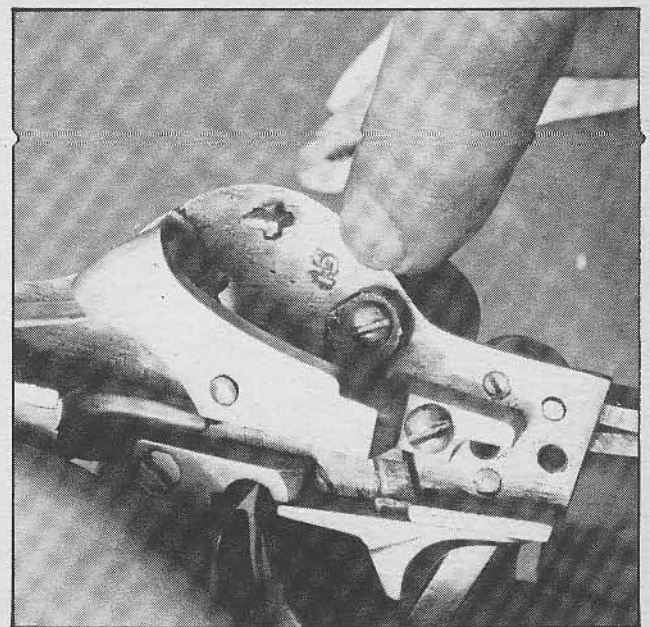
For the most part, arms in the collector class that have lain in the deep shadows of the cellar or attic were stored there many years ago. In some cases, these arms — possibly considered obsolete even at that time — were given no protective coating or grease or other preservatives.

As a result, many of these, when rediscovered by later generations, are in a sad state. Rust has formed like a cancerous growth and, in time, this same rust has caused deep pits in the metal surfaces. Perhaps termites have taken up residence in the wooden stock. In some cases, the metal of the handmade springs may have crystallized and broken. This is especially true of arms that were stored with the hammers or lock mechanisms at full cock.

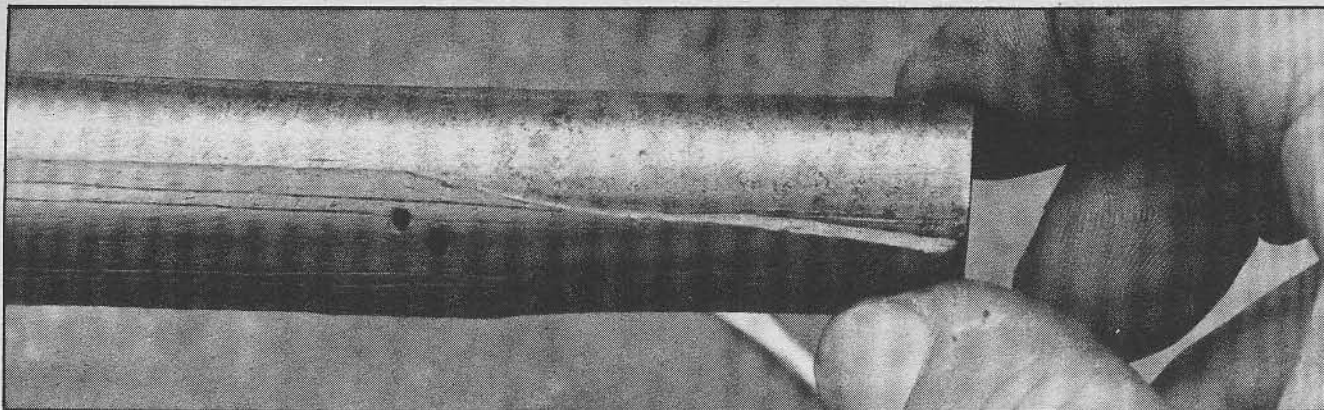
Many of the old arms, today classed as collector items of

varying worth, have suffered neglect and abuse, some to the point that restoration seemingly would be in vain. However, in the eyes of a person possessing imagination and the ability for careful workmanship, no antique gun should be lost to future generations simply because it has deteriorated to the point of near worthlessness. While their usefulness as active firearms may have passed, their attractive lines and historical significance remain.

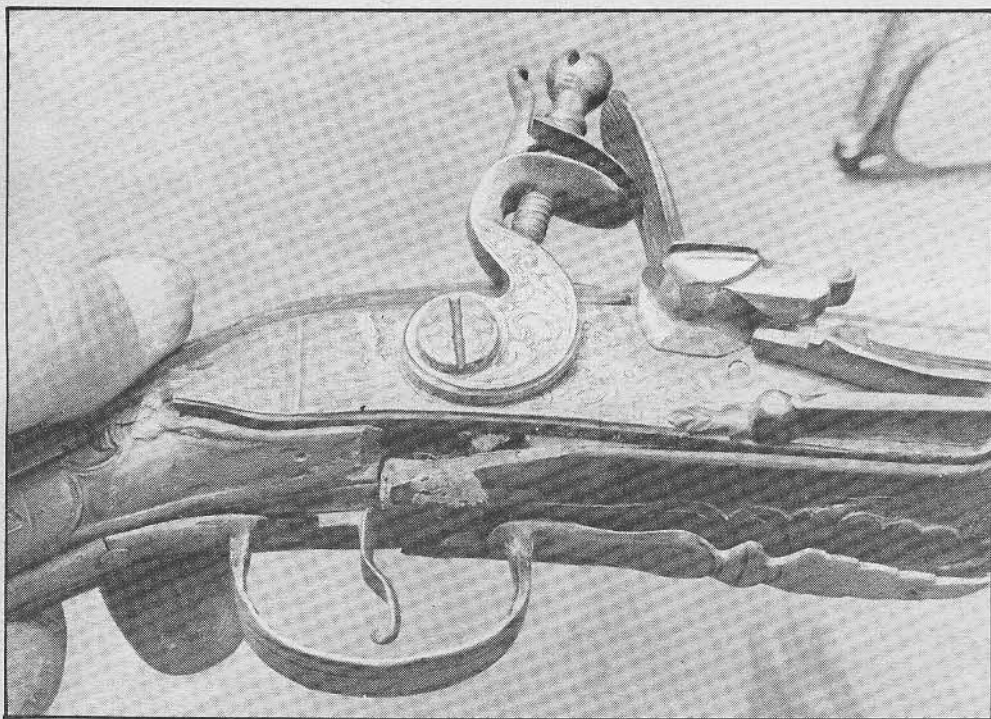
Restoration of antique arms involves varying degrees of craftsmanship in woodworking, metallurgy, plus knowl-



Proof or maker's marks can be found on lock mechanism or barrel. These are most important for proper identification of the arm and in evaluating it for sale to a collector.



Chipped wood sections often can be replaced with repairs that are undetectable. This adds value and desirability.



The mainspring slipping off the sear caused the entire stock of this antique pistol to split, then crack. Result was a major repair job that is described in chapter text.

edge of how to work such materials as gold, silver, brass, copper, wrought iron, ivory, bone, semi-precious stones, horn and the other materials used in aged arms, foreign and domestic.

But the most important phase of arms restoration is the ability to keep the repairs from looking new. To make replacement parts that are too shiny or too well finished could conflict with the original gunsmithing done in a pioneer environment. Should a part from a crudely built lock mechanism be broken, it can be replaced with a new, handmade part, provided this new part has the same crude appearance as the original components of the original lock.

The art of matching craftsmanship with some of the old

master armasmakers can prove a challenge to even the most experienced in the field of gun restoration. The real secret is to think as the old craftsman did. Consider the tools they had and the methods they utilized in making a complete lock mechanism, including the springs, bridles, frizzens on down to the finest and smallest screws and spring stirrups.

One of the most perplexing problems encountered by the modern arms restorer is in matching the varying age colors of the metal for the new parts and the age patina of the wood. All of this is necessary when parts have to be made to replace broken ones or wood has to be repaired or replaced.

Over the years, I have done antique arms restoration for

many collectors and museums and have become aware that each restoration job creates a different problem. Anyone undertaking to restore old arms, whether guns, edged weapons or other forms of armour, soon becomes aware that a multitude of chemicals and even household staples are needed for the correct restoration of any arm. Common salt, vinegar, citrus juices, as well as various items from the medicine cabinet, all can play an important part in the correct coloration of both metal and wood. Each arm will present a new problem along these lines and many hours of experimentation can be expended before the proper combination is achieved to produce the color that matches the rest of the arm.

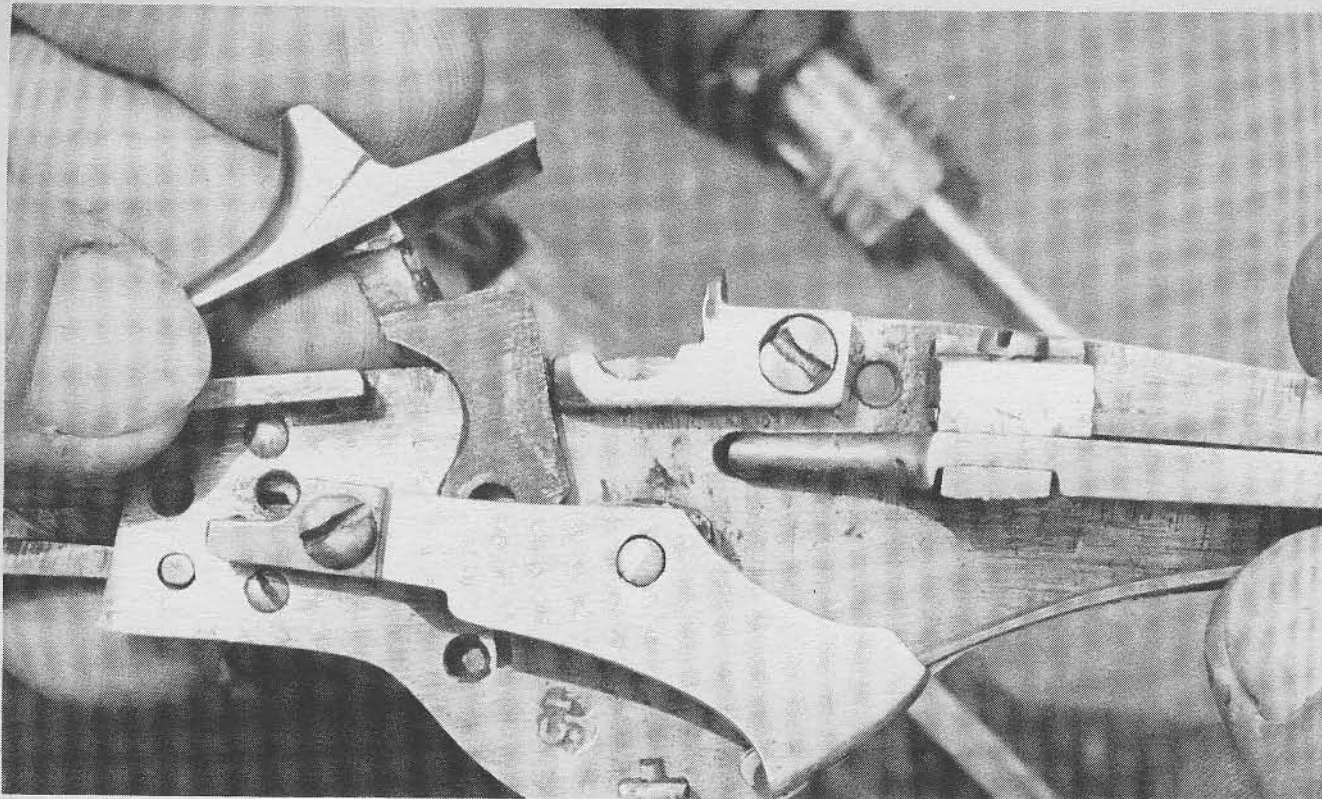
Aside from the correct coloration of any necessary new parts — which can prove to be one of the most trying of all chores in this field — there arises the problem of just how far one should go. A rifle brought to me for restoration was a version of the Remington Creedmore target rifle. In per-

fect condition, its value on the current collector market runs into a most respectable figure. However, this particular rifle had been through a fire in which the stock had been burned beyond repair. Luckily, neither the barrel or action had been damaged beyond the original bright, blued finish being dulled.

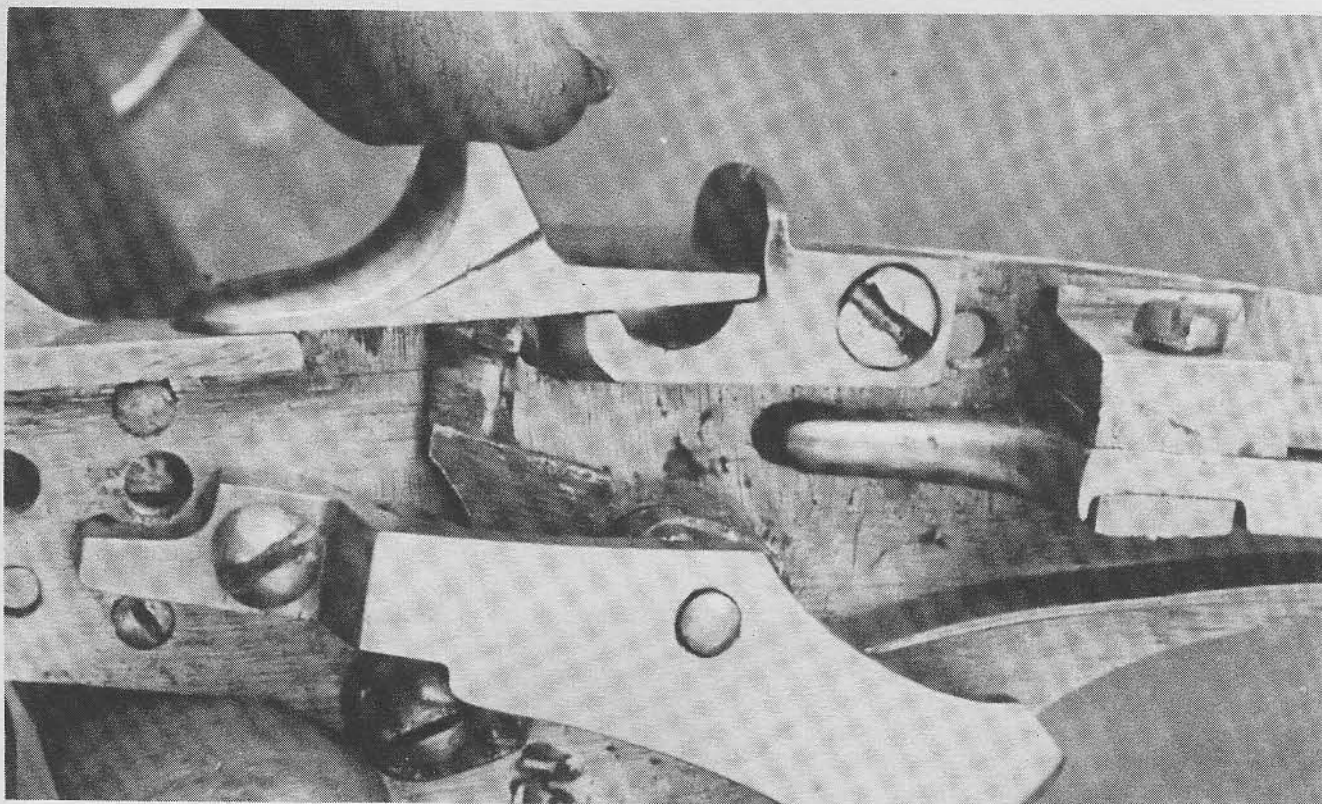
Thorough examination showed that the classic-style stock, from the rear tang back, had been turned to charcoal by the blaze. Forward of the rear tang, the lock section and forend were in amazingly good condition. Following consultation with the owner, I removed the charred portion of the stock in the area of the rear tang, which also incorporated the fully checkered pistol grip section. This was accomplished by cutting away the badly burned section of the stock, making a perfect V cut in the area of the pistol grip. Several months were spent in searching for a suitable piece of walnut to match the existing wood. Once located, the new walnut was shaped to the exact dimensions of the

The novice must recognize his limitations. Restoration of an old 1873 Winchester can create problems for an amateur. Replacement parts are difficult to find and are expensive. This may require that some parts be made by hand.





Above: The missing pan of this wheellock pistol had to be duplicated by the author using appropriate type of iron.
 (Below) When completed, the new pan cover was installed on 17th Century wheellock in exact fit; it worked perfectly.





The Colt 1851 Navy Model with squareback trigger guard is a rare firearm. When discovered, this one was in need of numerous small repairs to return it to normal shape. Original age patina was retained, holster also restored.

old stock, cut to fit the V in the pistol grip section, then it was doweled and epoxied in place.

After a forty-eight-hour curing period for the epoxy, the spliced area in the pistol grip section was filed and sanded to the exact conformation of the original. The checkering, much of which had been cut away to eliminate the charred wood, was recut, following the original pattern. The recut checkering completely covered and camouflaged the V joint of the new butt section. All that was necessary was to color the new wood to match that of the original forend.

For two solid weeks, I experimented with a variety of stains and chemicals — as well as combinations of both — before an exacting match was obtained for the Remington Creedmoore. Stains or coloratives for both wood or metal must be applied then allowed to set and dry for at least twenty-four hours before their true tones can be evaluated. This is especially true of woods. Stain, as a rule, will be much darker in color, when freshly applied, than when dried completely. However, on numerous occasions I have found this theory to work exactly backward with some stains and chemicals. It will go on dark and dry darker! Experimentation is the only solution.

With the Creedmoore, once the correct stain tones had been achieved on the wood, the entire stock was buffed on a muslin wheel, until a well worn patina look was achieved. It then was necessary to distress the new portion of the stock to match that of the original wood. Once finished, the new stock section was undetectable to even the most practiced eye. A fine old rifle had been returned to its place in the collecting world instead of being relegated to some scrap heap.

Naturally, there are purists who frown upon any arm that has undergone restoration treatment. In the majority of collections, even the finest, there may be found arms that have, at one time or another, been restored. If done properly, this shouldn't detract from their value. There are many Colt Walkers, Patersons, Henry rifles, Sharps and other collector items, passed from one collection to another, that all have seen some rather extensive restoration.

Another facet of restoration concerns the markings that may be found on many old guns and arms of all types. How many times have most of us found fine old guns with the names completely removed by undue buffing or sanding?

The term, restoration, does not mean mutilation! The correct restoration of anything means simply to put that object back in operative condition, as near to the original as possible, without gobbing it up with plastic woods and buffing it to death! Any markings, regardless of how dim they may appear on any arm, should be left as is. If there is rust pitting surrounding these markings, leave it alone! To attempt to remove it usually will cause the markings to disappear, along with the pits!

Of the multitudes of experts, I estimate that nine of every ten never have restored an antique arm in their lives. Yet, they are prone to dictate the methods to be used by craftsmen who have done this type of work for years! There are only seven or eight qualified men in the entire United States that can be classed as bona fide, qualified craftsmen, who thoroughly understand the full meaning of arms restoration and how it is accomplished correctly.

There are no set rules for restoring any arm — antique or

modern. Each will present a new set of circumstances with regard to the extent of the necessary repairs to both wood and metal. If done properly, such restoration should not detract from either the desirability or value of a rare arm.

Over the years, I have received many letters from would-be collectors requesting information as to how they might go about restoring an old shotgun. Almost invariably, these old relics weren't worth restoring. Unlike aged rifles, pistols and even edged weapons, the average shotgun hasn't increased greatly in value. An old, obsolete shotgun is just often that: an old, obsolete shotgun.

Unless it is a double-barrel flintlock fowling piece or possibly of the drilling type with an attached rifle barrel, value is just about at the bottom. But should that old shotgun be a Colt, Parker, L.C. Smith, W.W. Greener, Purdey, Holland & Holland or the like, the picture changes. There are collectors who will pay premium prices for

This 1858 Remington .44 Army percussion revolver was found covered with a film of rust after lying for decades on the dry Arizona desert. It was restored to shooting condition with careful workmanship, replacing some parts and grips.





choice specimens. Shotguns in this classification often are well worth restoring, provided such work isn't too expensive.

As outlined earlier, restoration can involve countless hours of experimentation merely to attain the correct stain for a piece of wood or a bit of ivory. More hours may be spent in fashioning some intricate piece of the lock mechanism to match exactly the original in looks and durability.

Consequently, the restoration of any fine and highly valued arm, whether a fine pistol or suit of knight's armour, can be costly. Take, for example, a rare Texas Dance revolver I restored some years ago. When brought to me, all of its internal parts were completely shot! The rarity had been a toy for the children of a Texas family, until purchased for a small amount by my client. In fact, when discovered, this rare revolver was being used as a hammer to drive nails into a soap box racer!

Restoration required that all internal parts be repaired extensively or replaced. The backstrap and trigger guard were repaired and even new nipples of the exact size and shape of the original Dance version were handmade and installed in the somewhat battered cylinder.

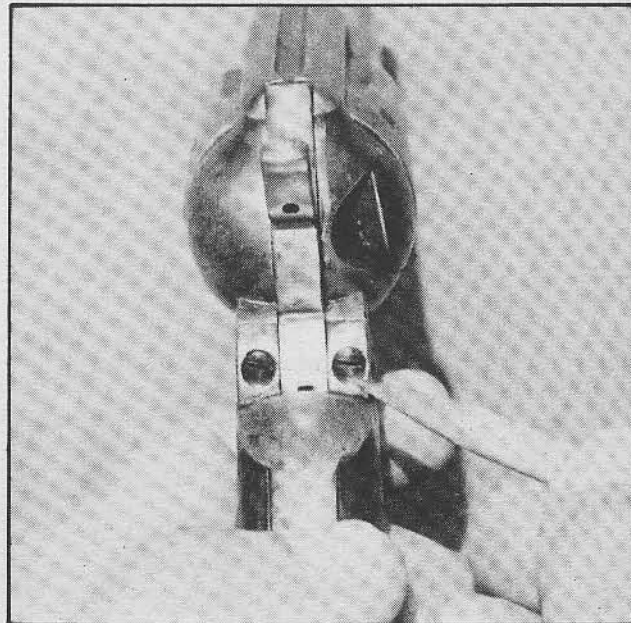
The exterior of the piece showed a nice age-brown patina, so it was left alone other than for straightening and compulsory repairs.

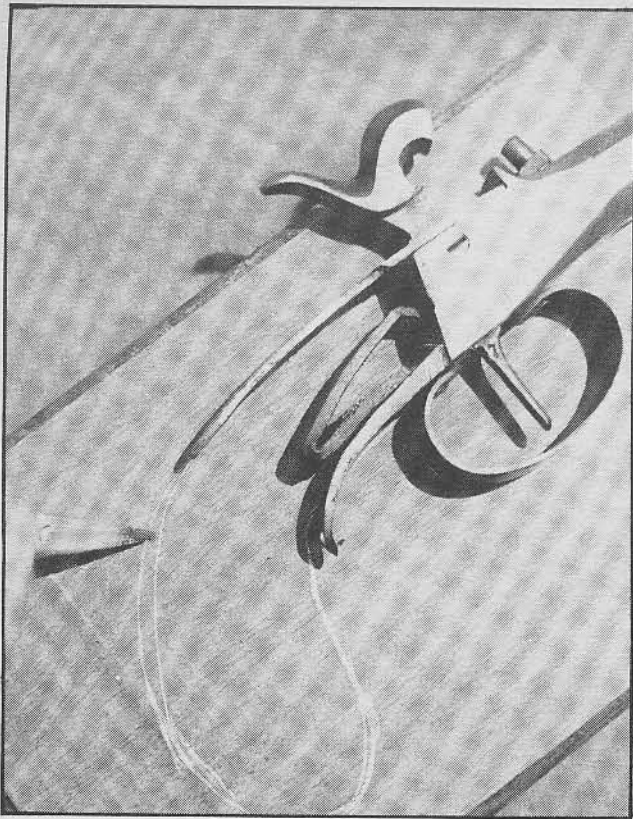
When completed some weeks later, the bill on this restoration ran into several hundred dollars. My client later sold the revolver to a mutual friend (who was fully aware of the extent of the restoration) for \$1200. Despite the costs of restoration, the client realized a neat profit on the rare Texas revolver, impossible had this rarity been left in its sad state of disrepair and abuse. Today, the gun is worth several times the price for which my client sold it.

Unethical? Not at all! Arms as rare and desirable as a

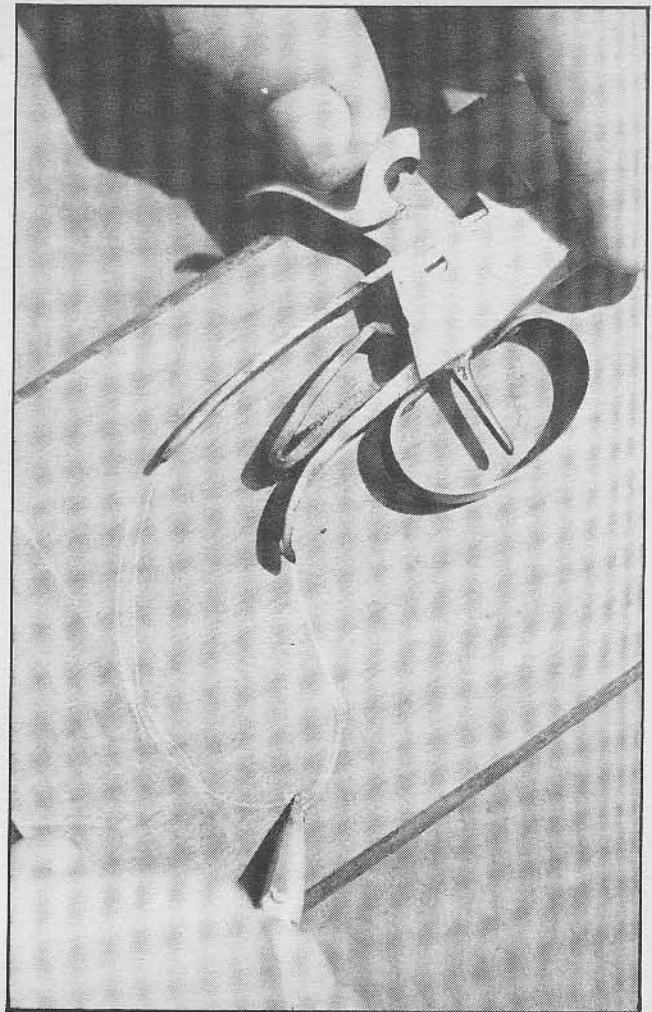
Fine 0000 steel wool, lubricated with light machine oil, is ideal for removal of light film rust, solidified dirt and grease from fine arms. Should any original bluing remain under rust film, this method should restore it.

This fine, old single-action Colt required only thorough cleaning and replacment of two screws to put it in shape.





Wooden grip for this mid-19th Century percussion single-shot pistol had deteriorated to dust. A new grip can be fashioned from walnut in method shown. (Right) Author studied old photos of such a pistol in order to copy the specifications for the new grip, make it authentic.



Texas Dance, a Colt Walker, a Paterson or any other arms of similar rarity certainly are worthy of extensive restoration, but only if that work is done correctly and without thought of falsification.

It is well known in collecting circles that one of the finest and most valuable collections of revolvers in the United States includes many that have undergone extensive repairs, restoration and even new blue jobs. However, in the eyes of many knowledgeable collectors, this doesn't detract from the desirability or the value of rare pieces. The quality of the restoration work should be as if done by the original maker a hundred years or so ago.

In any profession, there will be charlatans, fakers and con men. The charlatan may convince you that he is one of the best arms restorers in the business, but when you get your valued antique back, it's good for little more than a paperweight! The faker enters the gun restoration business, because it can pay well. However, he finds that he

can really clean up by turning out fake Colt Walkers, square-back Navys and pocket pistols. Later, he may graduate to more valued arms.

The con man is the exception rather than the rule, but still present in gun and arms collecting circles. He's the guy who will purchase a rather plain version of a desirable Winchester, Colt, Remington or some other in-demand breed of gun. Some months later, he will show up at a gun show with an especially fine engraved version of this same gun, which he offers for sale at a fancy price.

Honest arms restoration is one thing, but when this craft is used for bilking, it becomes a racket!

There are many pros and cons regarding correct and ethical restoration of any authentic, valuable antique: the field of antique firearms is one of the most critical from a standpoint of what can be done and what can't.

There is the old bugaboo about a wire buffer being used on antique arms. There is a variety of types of wire buffers

available to the novice. Some will ruin a fine, old gun or other armour quickly and efficiently. However, there are fine-bristled wire buffers that will remove only the rust and caked crud without harming the finest blued finish!

If an arm is gold- or silver-plated, no buffer can be used without the plating being removed quickly. But wire buffers in the proper texture are a must for the astute gun restorer, when rusted or dirty guns are handled.

Proper restoration of a collector-type arm concerns only that work essential to the overall appearance and mechanical functioning of the arm. It does not mean that because the wood is a bit gouged and rough it must be replaced.

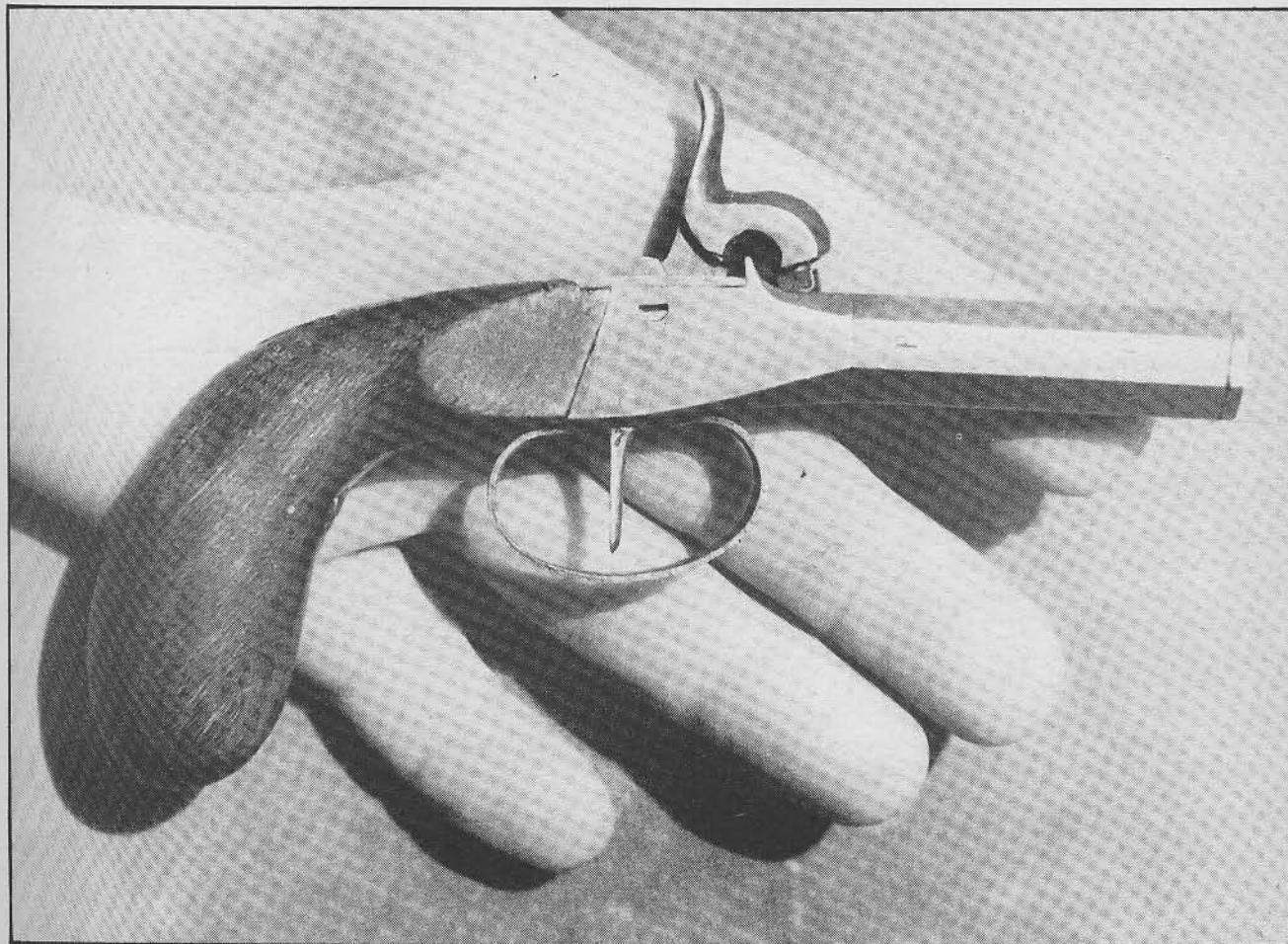
Basically, in correct restoration of any arm, literally nothing is taken away from the arm that is original. All original parts should be retained and repaired as necessary with the exception of broken springs, which are unrepair-

able as a rule. Missing parts may be made and installed to put the antique in good repair. However, when such replacements are made, they should be noted in letter form and passed on to the owner or future owner of the arm to assure no misrepresentation.

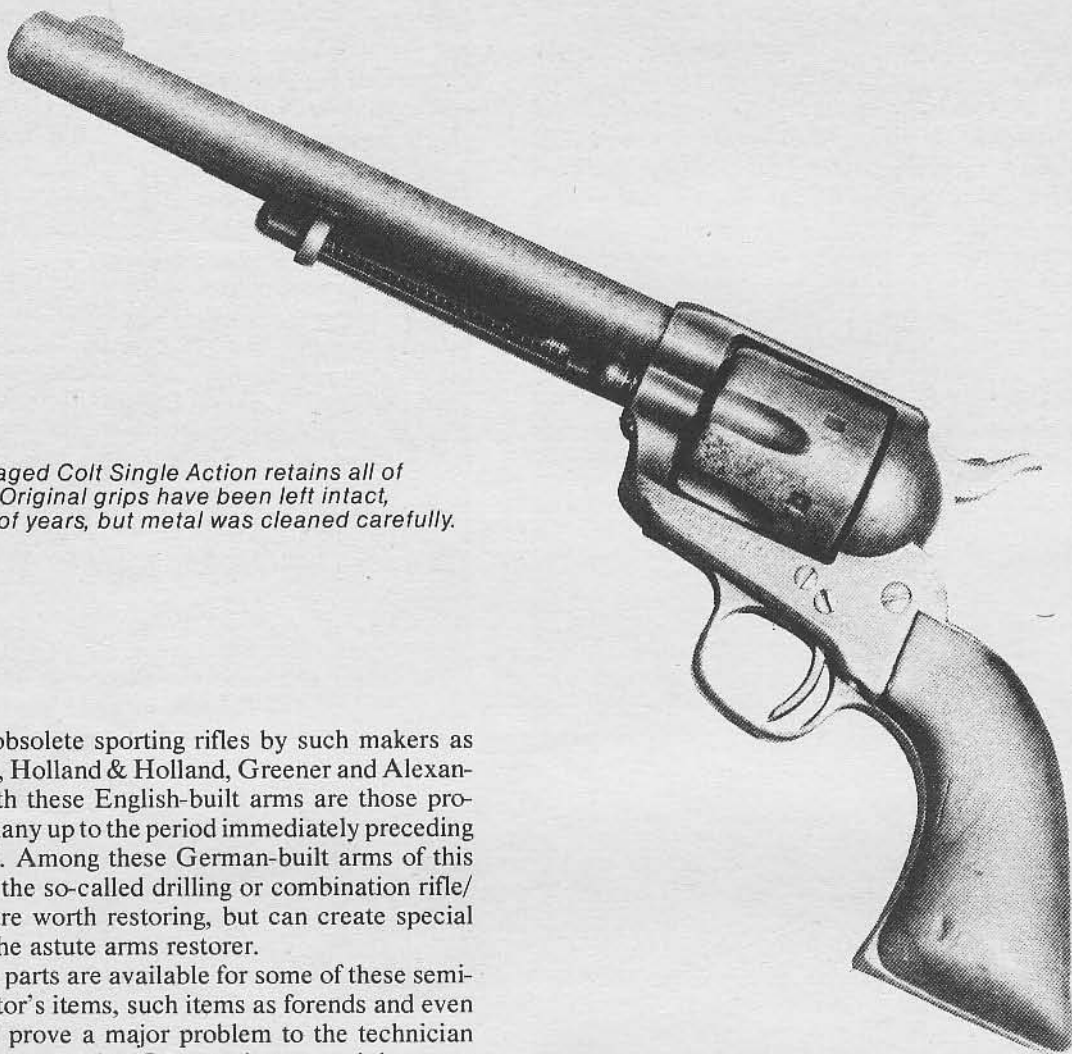
Arms restoration most certainly is not confined to ancient arms and armour. Highly prized in gun collecting today are such semi-modern guns as the 1886 Winchester, the 1892 and some early and deluxe version of the 1894 Winchester; certain Colt pistols and revolvers made after the turn of the century have come into their own as highly prized collector items. There are the various deluxe sporting arms as well as comparatively rare or unusual military arms produced in certain European countries from 1880 through the period of the Second World War.

For the most part, arms in this category include those

The finished walnut grip should be colored to a proper shade, distressed slightly to match gun's overall condition.



This beautiful aged Colt Single Action retains all of its age patina. Original grips have been left intact, showing wear of years, but metal was cleaned carefully.



fine but now obsolete sporting rifles by such makers as Rigby, Purdey, Holland & Holland, Greener and Alexander. Along with these English-built arms are those produced in Germany up to the period immediately preceding World War II. Among these German-built arms of this later period is the so-called drilling or combination rifle/shotgun. All are worth restoring, but can create special problems for the astute arms restorer.

While some parts are available for some of these semi-modern collector's items, such items as forends and even lock parts can prove a major problem to the technician attempting such restoration. In many instances, it becomes necessary to adapt and refit parts from other guns to serve the purpose on these later but obsolete models.

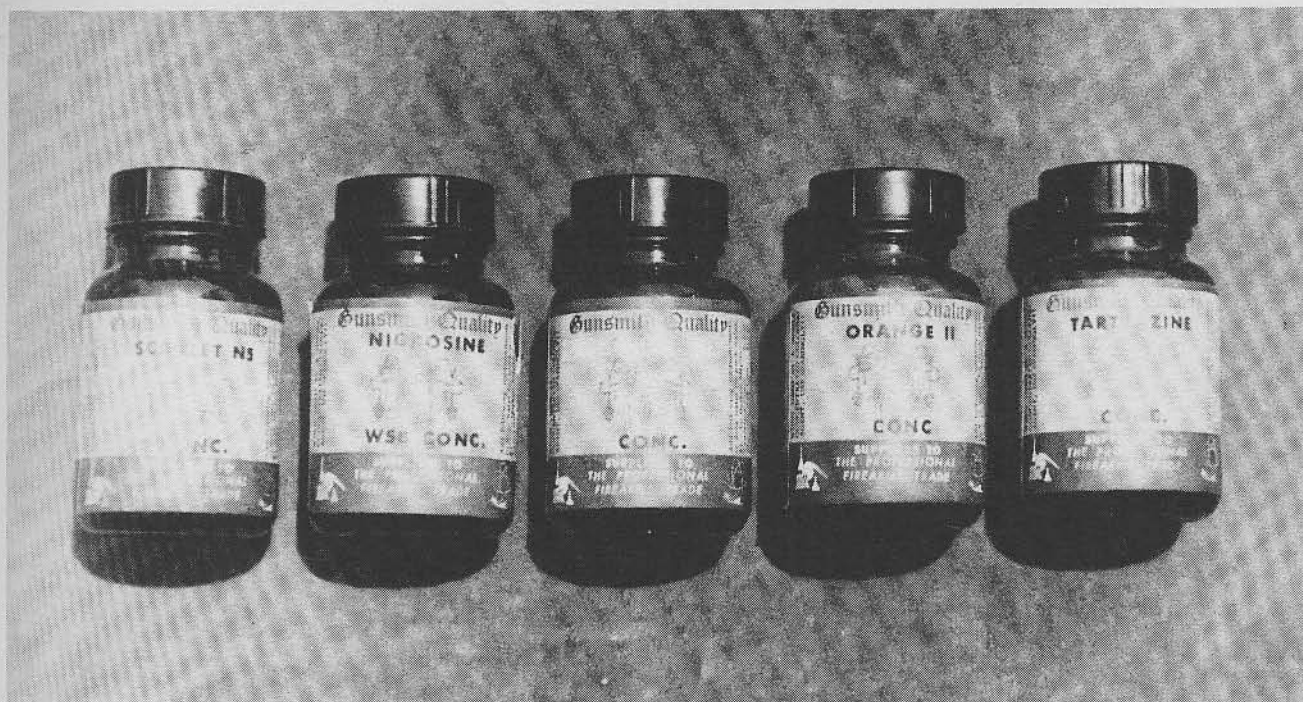
One problem facing the arms restorer is attempting to repair the repairs made by some novice. Many potentially fine arms, that could bear up well under even extensive restoration, have been ruined beyond repair or restoration by the inexperienced or inept attempting to do the work themselves. I have examined choice pieces that had been butchered with files and hacksaws to the point that they no longer made even good decorators. Had an experienced man worked over these guns, value would have been almost fully retained, as well as historical significance. If know-how and experience are lacking, it is best to get the opinion of an expert in the field to evaluate the necessary repairs and the potential value of the arm after restoration.

At gun shows around the country, one can see a multitude of otherwise fine collector arms that have been ruined under the hammer and chisel of the inexperienced. Not only do these once choice items include such rarities as wheellocks and snaphaunces, but semi-modern sporting

and military rifles and pistols. Even edged weapons have undergone various phases of unlearned butchery at the hands of the would-be arms restorer.

The science of arms restoration requires years of actual experience in the general field of gunsmithing, then more years of research of the various ignition systems and the component parts that go into each system. Hours of research often are necessary before even the most learned arms restorer can proceed with a specific job. Should one be restoring a suit of knight's armour from the Middle Ages (500 A.D. to 1450 A.D.), the craftsman wants to be absolutely certain that such repair materials and his workmanship match that of the correct period.

This is especially true if such work is being done on a fine piece of equipment for a reputable museum or an advanced collector. To goof on such a project would be unforgivable.



Brownell's offers a wide variety of concentrated dyes to mix to obtain an exact match with the wood. (Below) The burned wood around the locks of percussion and flintlock firearms may be replaced by inletting wood of a correct type in an exacting fit. When done correctly, the work should prove to be virtually invisible even to experts.

