

THE PEABODY PATENT ACTION— A WORLD FAVORITE

by W.E. Brundage

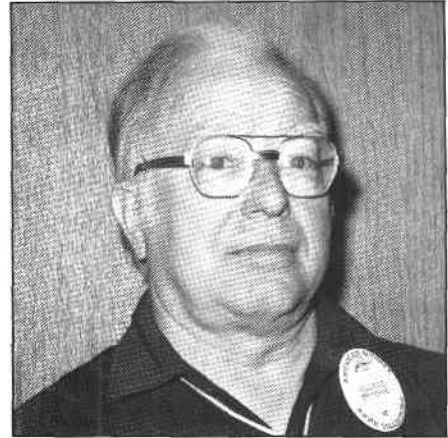
Each member of this organization is expected to accumulate information and then to disseminate it to the others. As a general collector with an emphasis on single-shot target rifles, I found it difficult to find a proper subject. I did consider a dissertation on patterns of knurling used by various manufacturers on their sights or perhaps the dates that models were changed but I was afraid such a talk might be drowned out by snores.

I chose instead to review the story of a single-shot action which is well known to almost all collectors, not by the original inventor's name but by the name of a man who designed a modification of the original patented action. Of course I am referring to the action patented by Henry O. Peabody of Boston, Massachusetts, and the patent for improvement by the Swiss, Fredrich Martini. I am annoyed by the misnomer for two reasons: first, as you will see, the "Martini" looking action may or may not contain the Martini improvement and secondly, having been associated with science and scientists over the past forty years, I am acutely aware of the pains taken to properly credit the originator of an idea. In that field, errors also have occurred that have some reasonable explanation, such as later work getting into the open literature at an earlier time. However, in the case of the Martini-Peabody interchange I can find no excuse except stupidity!

The story begins with an 1862 Peabody patent covering an underlever-operated breech block, pivoted at the rear so that the front end lowered to first expose the chamber and then operate a pivoted extractor. This patent and reissue in 1866 covered only the block, extractor and combination triggerguard-lever. The lock mechanism employed was an unpatentable side-hammer back-action one, typical of that period.

The Peabody patents were assigned to the Providence Tool Company. This company had originally been formed in 1845 to produce tools, heavy hardware, and similar items. It had, however, acquired experience in firearms production during the Civil War.

The recent introduction of breech-loading and self-contained ammunition brought on an inventors' race previously unknown in the arms industry. A quote from the Providence Tool Company 1865 and 1866 catalogs neatly illustrates the firearms situation at that time: "Of the two millions of men who at one time were enrolled in the conflicting armies, thousands studied to contrive the most effective fire-arm for field service, while multitudes of mechanics, at work in the arms manufacturing

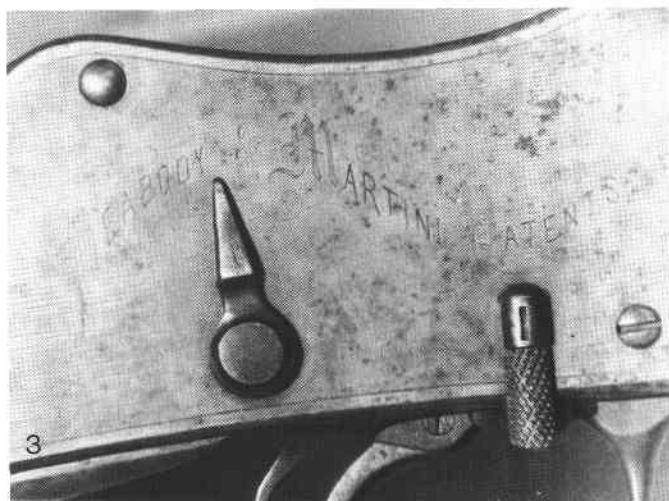
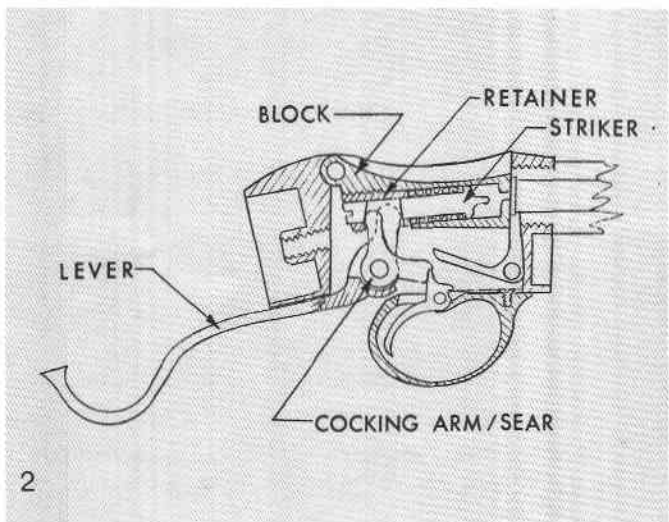
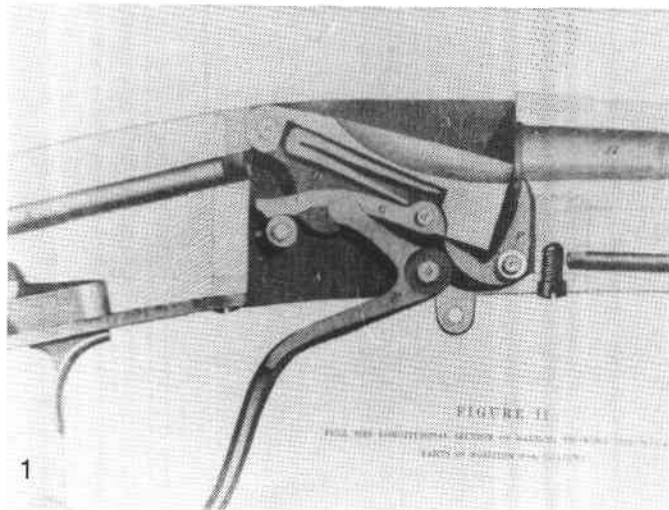


establishments of the country — stimulated by patriotic motives, as well as a thorough desire for the fame which would result from success — have competed with patient diligence for the honor of producing the most simple weapon, which, in the hands of the most clumsy and least intelligent soldier, could be manipulated without danger to the user, and be capable of deadliest effect upon the enemy."

The catalogs were presenting what we now commonly refer to as the Peabody side-hammer, quite common in military style but rare in sporting style. This literature also characterized magazine guns as "necessarily more complicated, and more liable to get out of order" — indicative of the repeater versus single shot conflict of the day. Of their own product they had this to say: "In the opinion of a vast majority of those most familiar with the subject, a single-shot breech-loader, one that shall possess great strength and simplicity, that shall be absolutely certain of fire, possess accuracy, and in the hands of the most inexperienced, or willfully careless man, prove at all times, and under all circumstances, an effective and trusty weapon, is entitled to claim superiority over any variety of gun hitherto known for infantry or cavalry service.

"As such, and one which has fully substantiated this claim, we beg to introduce, the PEABODY BREECH-LOADING FIRE-ARM."

Providence Tool Company was trying to have the Peabody adopted by the United States Government as the standard arm and had submitted it to the Board of Officers convened in early 1865 at Springfield to recommend a breech-loading gun for adoption. Initially 65 designs were presented for the Board's examination. Eight of these guns subsequently were given what can only be termed "torture-



tests" followed by "suicide-tests" for four of the guns: the use of overloads to attempt to destroy the weapons. Three of the models withstood sixty grains of powder and three 450 grain balls but only one could withstand 80 grains of powder and four balls—the Peabody, of course.

The Board did in fact recommend the Peabody for adoption, saying "it is undeniably the best for the use of troops." Unfortunately for the Providence Tool Company hostilities had ceased and the United States government did not feel compelled to immediately rearm with a new breech-loader. Eventually the decision was made to convert the available muskets to breech-loading in order to meet immediate wants, preventing the Peabody's adoption.

Providence Tool Company did sell many Peabodys but they were largely purchased by foreign governments, starting with an order for 3000 from Canada. One important order, at least for the future of the action, was for 15,000 for Switzerland. It was during the Swiss trials that Martini designed and patented "an improvement on the Peabody breech-loading system." This was a self-cocking system with a coil-spring-powered striker placed within the swinging block. "Hammerless" systems were not generally favored by military authorities of the period and the improvement seems to have had few supporters until it was selected as the British successor to the Snider system. The arm adopted was the Peabody block and underlever with the Martini internal striker and a barrel rifled on a system patented by Alexander Henry. The new arm was immediately referred to as the Martini-Henry, and later, the Martini-Enfield.

Providence Tool Company also adapted the Martini improvement and turned out both military and sporting rifles of the pattern under the name Peabody-Martini. Again, nearly all the production went overseas: 600,000 military guns to Turkey but fewer than 500 commercial models sold in the United States! The British influence won out however and the name Martini stuck. Although memory of the Peabody name faded after United States production ceased around 1880, his action, with or without improvements, has persisted in production and popularity, either abroad or in the United States, for over a century. When Mossberg introduced their short-lived Model L rifle in 1929, it was cataloged as having a "breech block of the famous Martini drop type." The design was a pure Peabody with an outside, albeit centrally-hung, hammer. In 1962 the action again went into production in the United States as the Ithaca Model 49 Saddlegun, described as a modified Martini, it too is an external hammer, "pure Peabody."

Along with an identically appearing Stevens—Savage Model 89 it was still listed as current in the 1979 Gun Digest. This certainly would boost Peabody's action as a contender for any longevity awards.

Now that some of the action's history has been covered, let's look at the basic design and some of its modifications and "improvements." The sectional view shown in figure 1 is from the 1866 catalog. The block, shown in the loading position, does rotate around a screw or pin at the rear but the actual thrust from firing is taken by the curved rear of the block fitting in a groove at the rear of the action. In the closed position the thrust is nearly in line with this bearing surface and frictional forces tend to keep the action closed so that strong locking devices are not necessary. The "V" spring in the block serves only to hold the block in either the loading or the firing position. On lowering the guard-lever further the block strikes the tail of the "L" shaped extractor. This extractor is quite powerful and can, if required, cover the full lower half of the case, but is usually made to grip each side of the cartridge head. The stock thru-bolt reinforces the wrist and makes the weapon suitable for military use as a bayonet handle.

Martini's improvement consisted of hollowing the block to hold a striker powered by a coil spring and an "L" shaped sear/cocking arm as shown in figure 2. The sear was forced back by opening the lever, recocking the striker. The basic block, extractor and thru-bolt features of the Peabody were retained. These features were adopted by the Providence Tool Company and their sporting guns all proclaimed both the Peabody and Martini patents, as can be seen in figures 3 and 4.

At the time Martini patented his modification there were other "hammerless" design modifications of the Peabody in existence but not in production. One variation, using an underlever and an internal swinging hammer with an odd long pivoted striker attached to it and operating through the hollowed block, was termed the Wesley-Peabody. It was described in a brochure produced by Providence Tool Company to promote its designs and is illustrated here as figure 5. Two other Peabody design variations were also illustrated. One was a top-lever design for musket conversion and the other, termed the "Peabody Self-Cocking" gun, also employed a top-lever along with a coilspring driven striker within the hollowed block. This design, shown in figure 6, should be compared to the Martini design in figure 2 for similarity. Possibly Martini's only original contribution was to adapt the coil spring design to underlever operation.

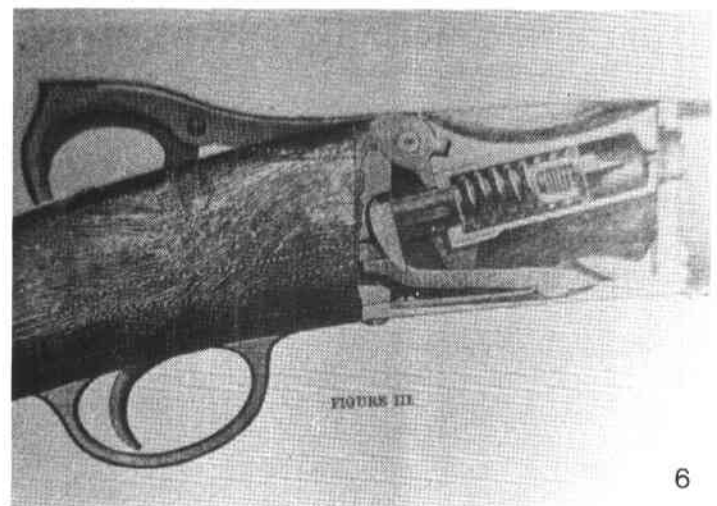
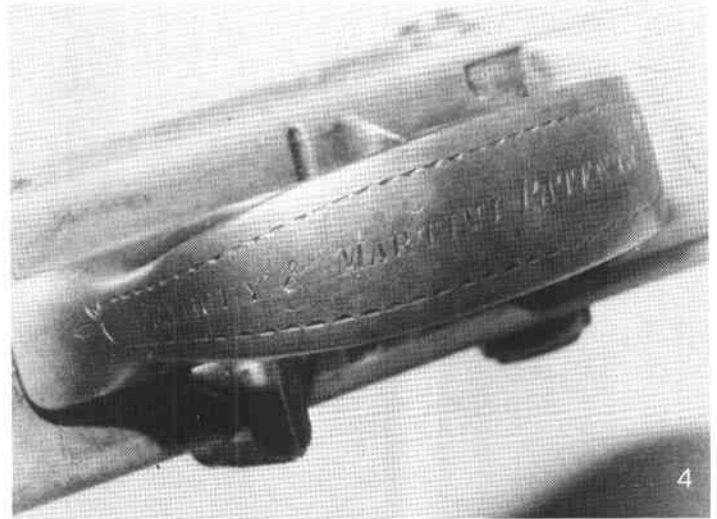
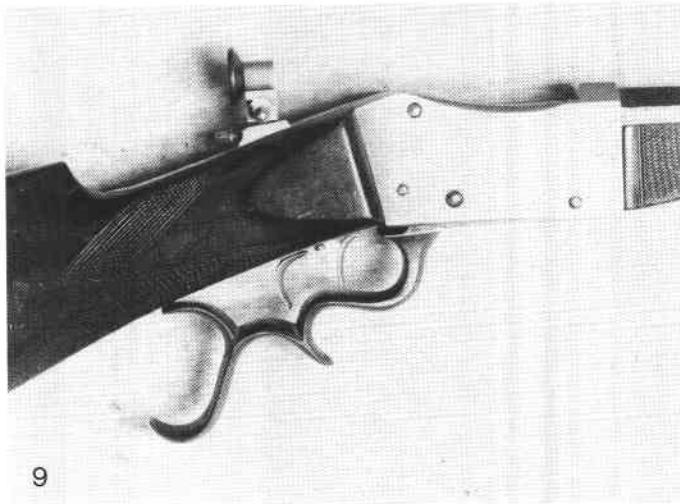
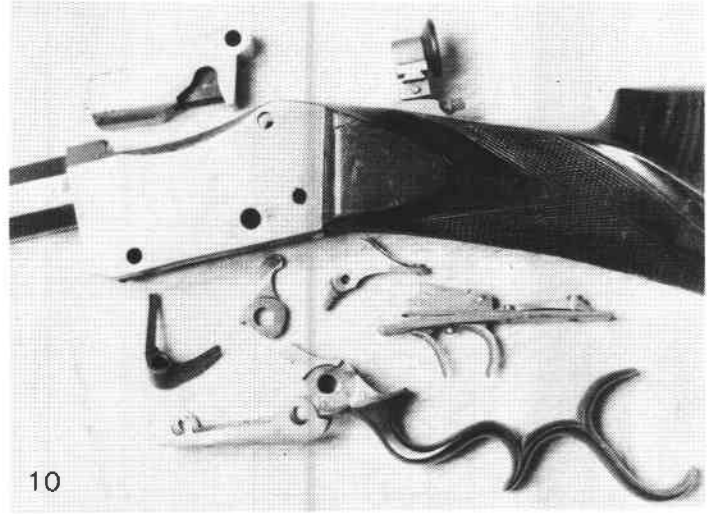
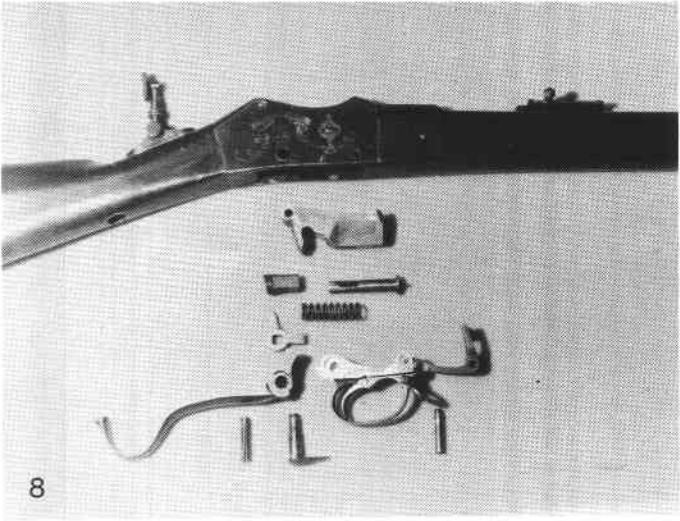




Figure 7 is a group of six rifles that are commonly referred to as "Martinis." The upper three of these do contain both the Peabody and Martini patent features but the lower three contain no vestige of the Martini design.

Figure 8 is a typical Peabody-Martini. This one is in .22 caliber as made by Greener in England. The rifle in figure 9 is a bronze-frame target gun by C. H. Gmehlin of Bloomington, Illinois. In figure 10 can be seen the simplest modifications, a different shape to the sear/cocking lever and an added secondary sear to permit the addition of set-triggers at the rear of the action. An upper tang is added only as a base for the sight, since the stock thru-bolt is retained. No external cocking indicator is provided.

Figure 11 shows a Swinburn's Patent rifle by Cope Brothers of London that certainly looks "British Martini." An integral top tang gives a hint of change and on the other



side (figure 12), in place of the usual cocking indicator an elongated lever is now seen. Figure 13 shows the internal parts removed from the frame. The block holds only the firing pin and its impulse is derived from a swinging "V" spring-powered hammer. This design is self cocking but the hammer can be manually lowered to a halfcock position or the lever used to recock in case of a misfire.

Figure 14 is another Schutzen-style rifle by H. Schuberth of Munich with an integral top tang and no cocking indicator. The internal parts are shown in figure 15. This rifle also employs the swinging hammer but a modification has been made to the rear of the block. The full force of the recoil is now borne by the pivot pin: the curved recess behind the block is missing because part of this area was cut away to permit cleaning from the breech end. Since these rifles were designed for relatively light 200

meter loads the loss of strength is of little consequence.

The final rifle illustrated in figure 16 is by F.W. Kessler of Suhl. His modification narrowed the lower portion of the action so that a one-piece stock could be used. In figure 17 the stock has been removed and in figure 18 more mechanical details can be seen. The full recoil is taken on the pivot pin, which is also a safety device, as it can be turned to prevent the tip of the swinging hammer from passing it. The rear of this action is not cut away for breech-cleaning. You have now been exposed to the Peabody action and some of its modifications, some manufactured in quantity and some that never got out of the tool room. If there is a moral to this story, it is that you can call the action by any name you like but if it really is a Martini you have to know what went into it! (Fig. 19)

