## The Colt Single Action Revolvers DESIGN HISTORY



**Figure 7-** Colt 1851 Navy Revolver exploded action parts illustration by Heritage-VSP Staff artist is shown for comparison due to action component design similarity. Consult collector publications for additional data on the Colt Model of 1851 and other Colt percussion revolvers. Although the 1851 Navy has a single stage hand and cylinder ratchet, action function is otherwise basically the same as the later M1873 Single Action Army. As with the S.A.A., the bolt cycling cam (hammer cam) is located on the lower right side of the hammer, and bolt cycling cam and cylinder bolt arm interaction together sequence and time cylinder bolt pickup and bolt drop. The hammer also elevates the cylinder hand which, in engaging the cylinder ratchet, rotates the cylinder and times cylinder rotation. Correct action function and timing are discussed below. Action component tolerance related problems and remedies are discussed on page 21.

Basic function note: Although this manual doesn't specifically cover the Colt 1851 Navy Model or other percussion revolvers-'51 Navy action parts design is so similar that most Colt Single Action Army Revolver action timing and component fitting rules and procedures generally apply. Troubleshooting is essentially straightforward and based on detection of any deviation from correct action timing and function. **Correct action function**: (1) Before even considering bolt timing, the hand and ratchet must first be capable of carrying-up (rotating) the cylinder far enough to align each cylinder bolt locking slot cut with the cylinder bolt as each chamber reaches chamber/bore axis alignment. (2) With item 1 established, bolt timing should then be as follows: (a) rearward movement of the hammer must cause the cylinder bolt to begin to pick up (referenced with the revolver upside down) at least by the time the hammer reaches the 1/4 cock position; (b) the bolt must continue to pick up and clear the cylinder in time to permit unimpeded cylinder rotation; (c) the bolt must then drop to contact each cylinder locking slot lead (approach) at the beginning of, but not later than, the middle of the lead, and (d) bolt engagement should then occur just as, or fractionally before, the trigger sear engages the hammer at full cock position. Earlier or later bolt drop timing can mar the cylinder, peen or wear the edge of the bolt locking slot cut or, in a worst case scenario, prevent proper cylinder bolt/locking slot engagement.