

The first was for shock effect directed toward the natives who had never seen firearms. As conveyed in an account of a later expedition, they blasted trees to demonstrate the expedition's strength of force as a preventive measure when the natives contemplated attacking. Another reason is because they were traveling to unknown lands, and they expected to encounter cities with wooden or light mud brick walls that would need to be breached. Instead, in this particular area in southern Arizona, they only encountered natives living in houses made of branches, reed mats and mud. The third reason is that firearms of this size were

good for both offense and defense in rough terrain.

We believe that two of the six total rampart guns in the expedition were left behind on Coronado's orders to defend the town and local mining interests. The town was more than one kilometer long, so one gun would likely have been insufficient. This means that four were carried farther north, as an expedition-related historical document suggests. Two round balls of the approximate diameter that it fired have been found at other Coronado battlefield sites in New Mexico. Each of the guns would probably have been slightly different in appearance and even bore diameter,

extremely versatile and highly portable, and they were

Everything in the Coronado expedition was carried on foot or by animal, thus necessitating that the six wall guns brought for protection—this one in .873 caliber (r.)—be reasonably compact and lightweight.



Though there is virtually no trace of the town on the surface, the hackbut cannon was discovered under the remains of a wall of mud and rock that collapsed during a battle between Spanish inhabitants and local Indians. Note the touchhole and priming powder ledge (l).

given the crude bronze sand-casting techniques utilized. The gun pictured here was cast horizontally through three sprue holes simultaneously.

It was not loaded when found by Dr. Seymour. In addition, no lead balls of this size have yet been discovered at the site, which leads us to believe that this wall gun was primarily used with buckshot, or "swan shot" as it was called back then, because people of this era ate swans as game animals. The gun also has no sights, which supports the buckshot theory. A maximum load of about 4 ozs. of No. 4 buckshot (86 pellets of .24 caliber) would have made for a devastating load against a formation of lightly clad natives. At 1,125 f.p.s., a load of No. 4 buckshot will fly about 460 yards when fired at a 35-degree angle. Buckshot can wound a man at well over 100 yards, and even a single pellet, depending on where it hits, can put someone out of action. A rough estimate as to the distance that a single large bore-size lead round ball could travel when shot would be about 650-750 yards when fired at a 35-degree angle. For comparison, a typical 12-ga. shotgun slug today will travel 817 yards with a muzzle velocity of 1,600 f.p.s.

Numerous round and deformed lead projectiles of all sorts



