- 1. Anschutz match air rifle uses an oil-filled hydraulic cylinder, an action similiar to car-type shock absorbers to compensate for the forward motion of the compression piston.
- 2. Walther's match air rifle uses a single stroke pheumatic system which allows a piston to compress air into a chamber only a few times larger than the pellet. Movement of the trigger sear allows a heavy spring-loaded hammer to hit a striking lever which in turn pushes open an exhaust valve.
- 3. Beeman's match air rifle involves double-acting platons which results in a smooth recoilless and vibration-free firing action.
- 4. Feinwerkbau's match air rifle uses a principle where movement of the compression piston at the moment of firing trips a sear which releases the entire barrelled receiver assembly to ride on a pair of hidden, hardened rails. The necessary "equal and opposite" reaction causes this heavy metal mass to slide back about a on the rails while the shooter holds the motionless stock and trigger. The shooter feels almost nothing and his sighting picture is undisturbed. The mechanism must be returned to its locked-forwari position for the next shot.

Eliminating the disturbing recoil sensation caused by the moving piston prior to pellet movement in these excellent match air rifles allows the shooter to concentrate on all the fine points of shooting affecting his performance such as sight picture, hold, trigger pull and follow-through.