From the preceding description, it can be seen that the pistol has been provided with a trigger balance which is an independent member in the fire control mechanism. It is supported entirely by the stock, and is spring loaded to insure constant contact with the trigger link. Its purpose is to reduce jar-off when the gun is dropped on the muzzle.

Tests have proven that the inclusion of the trigger balance has substantially eliminated jar-off due to dropping on the muzzle. One gun with an adjustable sear block spring was used throughout the test. The gun was dropped on the muzzle from various heights on to a piece of 44 lbs. fir plywood supported by concrete. The gun was dropped with and without the trigger balance and dropped ten times under each condition from each of the test heights. When the trigger balance was removed, the sear block spring was adjusted to provide the original trigger pull. Test results are shown in the table below:

Drop Height Inches	Trigger Pull Ounces	Number of Jar-Offs with Trigger Balance Installed in 10 Drops	Number of Jar-Offs without Trigger Balance Installed in 10 Drops
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

The above test demonstrates that the inertia weight performs as desired. This weight was installed in the fire control mechanism to counterbalance the additional weight from the linkage which was necessary to connect the forward trigger to the fire control. This inertia weight functions only when the gun is dropped on the muzzle to reduce and substantially eliminate the chances of accidental firing.

What is claimed is:

1. A firearm comprising a stock, a receiver mounted in said stock, a barrel secured to said receiver, a fire control mechanism mounted in said receiver at the butt end thereof, said fire control mechanism comprising a sear block pivotally mounted in said receiver, a trigger mounted forward of said sear block, a member connecting said trigger and said sear block, an inertia weight pivotally mounted between said trigger and said sear block adjacent said member, said weight biased toward said member whereby forward motion of said member is prevented when said firearm is dropped on the muzzle.

2. A drop firing prevention control for a firearm, said firearm comprising a stock, receiver, barrel and fire control mechanism, a sear block pivotally mounted in said receiver for forward movement to cause said firearm to fire, a trigger mounted forward of said sear block, a trigger link connecting said trigger to said block, a trigger balance mounted in said stock between said trigger and said sear block, a balance spring mounted on said balance biasing said trigger balance to engage said link whereby said link is prevented from moving forward when said firearm is dropped on said barrel.

3. A drop fire prevention mechanism for a firearm of the type having a trigger remote from a sear block, said drop fire prevention mechanism comprising a trigger link connecting said trigger to said sear block, a trigger balance pivotally mounted intermediate the ends of said link and biased into engagement with said link, said trigger balance preventing forward movement of said trigger link when the firearm is dropped on the muzzle.

4. The combination described in claim 3, in which said sear block is pivotally mounted for forward movement to cause discharge of the firearm.

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