

FIG. 3: View of the device suggested by Luigi Puccianti and used by Rossi for the experiment of magnetic deviation. 69 The core of the magnet consisted of two iron plates A and B, the two armatures C and D closed the magnetic circuit. The wire carrying the magnetizing current was wound round the plates in a single layer; the closed induction lines pass through the core, as indicated by the arrows, clockwise or counter-clockwise, according to the direction of the magnetizing current. Above and below the magnet there are two tube counters; their axes are horizontal and parallel to the direction of magnetization. Particles passing through the upper counter are concentrated toward the lower counter or deflected away from it depending on the sign of their charge. Rossi measured the coincidence rates with opposite magnetic fields, and found at first a very little difference in favor of positive particles, an effect much smaller than the expected one. In a second experiment the difference was within the limits of the experimental errors. On the right, the side view shows the trajectory of particles with a "wanted" charge sign (solid lines), and of "unwanted" ones (dashed lines). On the left, the top view shows the direction of the magnetic field and the position of the top G-M counter.