It is known that a fully relativistic integration of the null geodesics of a weak perturbation of flat spacetime leads to a correction of order $v/c$ to the bending angle and time delay due to a gravitational lens in slow motion with small acceleration. The existence of the $v/c$ correction was verified by the VLBI experiment of the bending of light by Jupiter on September 8, 2002. Here the $v/c$ correction is interpreted by means of standard aberration of light in an optically active medium with an effective index of refraction induced by the gravitational field of a lens in motion.