This thesis is devoted to the studies of charge carriers interactions to magnetic Mn2+ ions in single (Cd,Mn)Te quantum wells (QWs) with (Cd,Mg)Te barriers in the regime of low manganese concentrations ($x \leqslant 0{,}5\%$). The main experimental technique used in this work is optically detected magnetic resonance (ODMR), based on observation of the changes in photoluminescence and reflectance optical spectra. Magnetic resonance field (Knight shift) and spin-lattice relaxation were studied depending on carrier concentration and type. The carrier gas concentration in the samples containing hole gas in QW was controlled using the above barrier's band gap illumination. The control of the carrier gas concentration in the n-type sample was accomplished with the electrical gating. It was observed that even low concentrations of hole gas significantly change the spin-lattice relaxation time and magnetic resonance field of the Mn2+ ions. Interactions with the electron gas do not change the magnetic resonance field. However, they affect spin-lattice relaxation. Obtained results can be described by a simple model of interactions between two spins – carrier and ion.