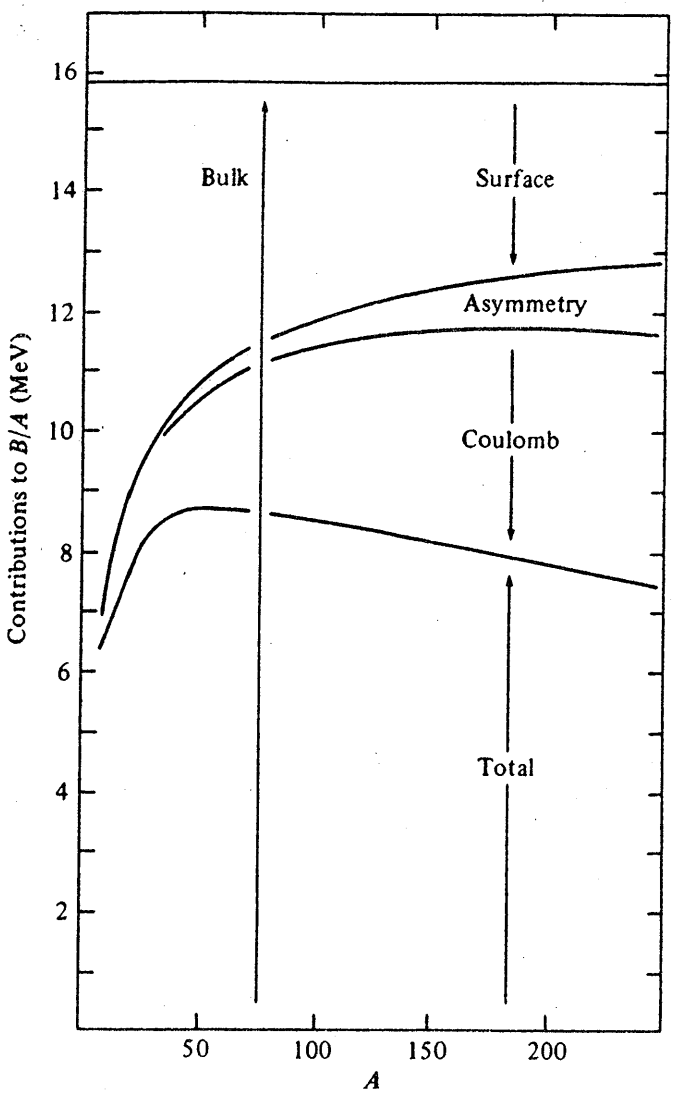

Fig. 4.8 The contributions to B/A. Note that the surface, asymmetry and Coulomb terms all subtract from the bulk term.

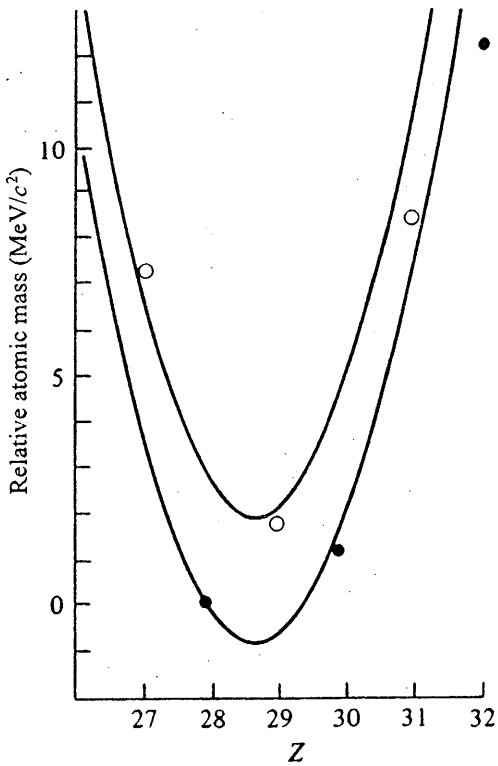

Fig. 4.5 The atomic masses of atoms with $A = 64$ relative to the atomic mass of $^{64}_{28}$Ni. Open circles ○ are odd–odd nuclei, filled circles ● are even–even nuclei. The theoretical even–even and odd–odd parabolas are drawn using the parameters of equation (4.5). Note the odd–odd nucleus $^{64}_{29}$Cu, which can β^--decay to $^{64}_{30}$Zn or β^+-decay to $^{64}_{28}$Ni, both of which are stable, naturally occurring, isotopes. These decays are discussed in detail in Chapter 12.

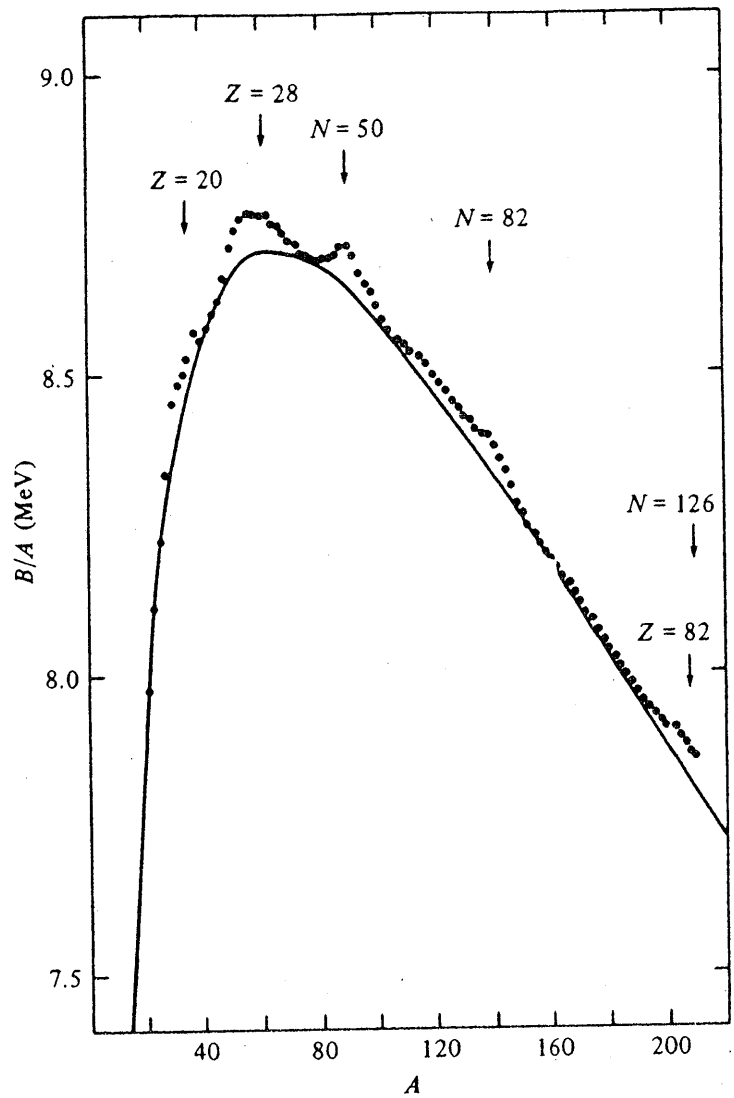

Fig. 4.7 The binding energy per nucleon of β-stable (odd-A) nuclei. Note the displaced origin. The smooth curve is from the semi-empirical mass formula with Z related to A by equation (4.14). Experimental values for odd-A nuclei are shown for comparison; the main deviations ($<1\%$) are due to 'shell' effects not included in our formula.