380 (fixed-point theorem) Suppose we define *nat* by fixed-point construction and induction.

$nat = 0, nat{+}1$

$B = 0, B{+}1 \Rightarrow nat{:}\ B$

Prove that ordinary construction and induction

$0, nat{+}1{:}\ nat$

$0, B{+}1{:}\ B \Rightarrow nat{:}\ B$

are theorems.

§ Ordinary construction is immediately implied by fixed-point construction. What remains is to prove ordinary induction from both fixed-point construction and fixed-point induction.