```
his_pair_def  THM

⊢  ∀'a,'b:S.
   all
   (λp:'a → 'b → hbool. equal
                         (is_pair(p)
                         ,exists
                          (λx:'a. exists
                                  (λy:'b. equal(p,mk_pair(x,y))))))
  by HN THEN StrongAuto THEN Unab [‘his_pair‘] THEN Simp
     THEN
     StrongAuto
END
```