```
hlength_eq_cons  THM

⊢  ∀'a:S.
   all
   (λP:hlist('a)
    → hbool. all
             (λn:hnum. equal
                       (all
                        (λl:hlist('a). implies
                                       (equal(length(l),suc(n))
                                       ,P(l)))
                       ,all
                        (λl:hlist('a
                                  ). implies
                                     (equal(length(l),n)
                                     ,(λl:hlist('a). all
                                                     (λx:'a. P
                                                             (cons
                                                              (x
                                                              ,l))))
                                      (l))))))
  by HOL "hlength_eq_cons"
END
```