```
fin_card_vs_nat_eq  THM

⊢  ∀a,b:ℕ. (ℕa ~ ℕb) ⟺ a = b  by Auto
|
|\
| 1. a : ℕ
| 2. b : ℕ
| 3. ℕa ~ ℕb
| ⊢  a = b
|   by BackThru:
|      Thm*  (A ~ ℕm) ⇒ (A ~ ℕk) ⇒ m = k    {counting_is_unique}
|      Using:[ℕa]
|
.\
. 1. a : ℕ
. 2. b : ℕ
. 3. a = b
. ⊢  ℕa ~ ℕb
. | by BackThru:
. |    Thm*  A = B ⇒ (A ~ B)    {one_one_corr_2_weakening_wrt}
. |
. ⊢  ℕa = ℕb  by Analyze
END
```