```
beq_eq  THM

⊢  ∀p,q:𝔹. p =ᵇ q = true₂ ⟺ p = q
  by (Unfold ‘beq‘ 0 THEN GenRepD) THEN (BoolCases 1)
     THEN
     (BoolCases 1)
     THEN
     (Try (Reduce 0))
     THEN
     (Try (Reduce -1))
END
```