```
fappend-increasing  THM

⊢  ∀n,m:ℕ+, f:(ℕ(n-1)→ℕ(m-1)).
   increasing(f;n-1) ⇒ increasing(f[n-1:=m-1];n)
  by Auto THEN (ParallelOp -1) THEN (Unfold ‘fappend‘ 0)
     THEN
     (Reduce 0)
     THEN
     SplitOnConclITE
     THEN
     SplitOnConclITE
     THEN
     EasyHyp’
END
```