expatiate further on the many Purpoſes to which they are capable of being applied.

## CHAP. VI.

### *Of ſcaling Ladders.*

PRocure the longeſt Poles that can be got, of two Inches and three Quarters in diameter; Aſh is the Wood which is moſt eligible, but as they ſhould be thirty, or five and thirty Feet in length, which *Engliſh* Aſh ſeldom runs to, clear of Knots, young Fir Trees may ſerve the Purpoſe, for Poles ſawed out of Timber will not be ſo proper, as not being ſo tuff and ſtrong. The middle Part of theſe Poles ought, as I obſerved, to be two and three Quarters of an Inch in diameter, but they ſhould be ſomewhat tapering towards each End; when theſe Poles are to be converted into Ladders for ſervice, two of them muſt be ſet parallel at a proper Diſtance aſunder, and kept ſo by proper Iron Work that will not damage them; round Loops or Sockets at each End of the Bars, to put on upon the Poles, ſeem likely to anſwer this Purpoſe beſt, and they may be faſtened at the Ends by Skrews. The Steps of theſe Ladders ſhould be ſmall Ropes, ſtretched tranſverſly between the Poles, their Height one above another ſhould not exceed one Foot; they might indeed be eighteen Inches Diſtance, but then a Man muſt be obliged to give a Spring every Step that he aſcends, and this would require a ſtronger, and conſequently a heavier Ladder.

Such a ſcaling Ladder, wide enough to hold two Men a-breaſt, and thirty or thirty-five Feet long, will admit of ſix Men upon it at a Time, and the Ladder not weigh much above one Hundred