PROPOSITION XVII.   THEOREM.
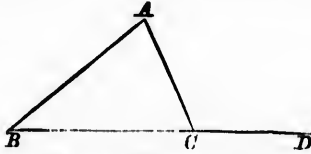
Any two angles of a triangle are together less than two right angles.

Let *ABC* be any △.

Then must any two of its ∠ s be together less than two rt. ∠ s.

Produce *BC* to *D*.

Then   ∠ *ACD* is greater than ∠ *ABC*.   I. 16.

∴ ∠ s *ACD*, *ACB* are together greater than ∠ s *ABC*, *ACB*.

But   ∠ s *ACD*, *ACB* together = two rt. ∠ s.   I. 13

∴ ∠ s *ABC*, *ACB* are together less than two rt. ∠ s.

Similarly it may be shewn that ∠ s *ABC*, *BAC* and also that ∠ s *BAC*, *ACB* are together less than two rt. ∠ s.

Q. E. D.

NOTE 4.   *On the Sixth Postulate.*

We learr from Prop. XVII. that if two straight lines *BM* and *CN*, which meet in *A*, are met by another straight line *DE* in the points *O*, *P*,
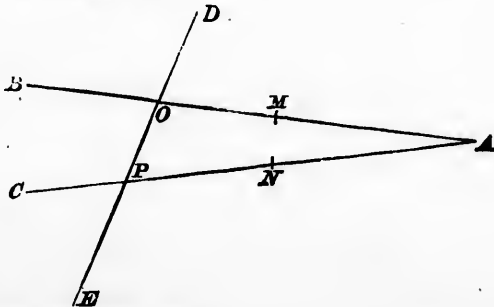
the angles *MOP* and *NPO* are together less than two right angles.

The Sixth Postulate asserts that if a line *DE* meeting two other lines *BM*, *CN* makes *MOP*, *NPO*; the two interior