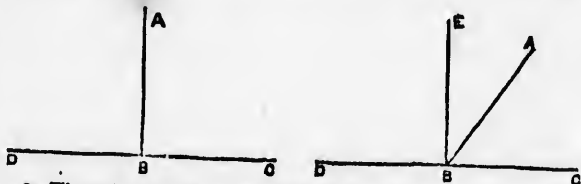


DEMONSTRATION.—1. If the angle CBA be equal to the angle ABD, each of them is a right angle. (*Definition 10.*)
 2. But if the angle CBA be not equal to the angle ABD, from the point B, draw BE at right angles to CD. (*Proposition 2, Book I.*)



3. Therefore the angles CBE, EBD, are two right angles. (*Definition 10.*)
 4. Because the angle CBE is equal to the two angles CBA, ABE, together, add the angle EBD to each of these equals.
 5. Therefore the angles CBE, EBD, are equal to the three angles CBA, ABE, EBD. (*Axiom 2.*)
 6. Again, because the angle DBA is equal to the two angles DBE, EBA, add the angle ABC to each of these equals.
 7. Therefore the angles DBA, ABC, are equal to the three angles DBE, EBA, ABC. (*Axiom 2.*)
 8. But the angles CBE, EBD, have been shewn to be equal to the same three angles. (*Demonstration 5.*)
 And things which are equal to the same thing, are equal to one another.
 9. Therefore the angles CBE, EBD, are equal to the angles DBA, ABC. (*Axiom 1.*)
 10. But the angles CBE, EBD, are two right angles. (*Demonstration 3.*)
 11. Therefore the angles DBA, ABC, are together equal to two right angles. (*Axiom 1.*)
- CONCLUSION.—Wherefore the angles which one straight line, &c. (*See Enunciation.*) Which was to be shewn.

PROPOSITION 14.—THEOREM.

If at a point in a straight line, two other straight lines upon the opposite sides of it make the adjacent angles together equal to two right angles, these two straight lines shall be in one and the same straight line.

HYPOTHESIS.—At the point B in the straight line AB, let the two straight lines BC, BD, upon opposite sides of AB,