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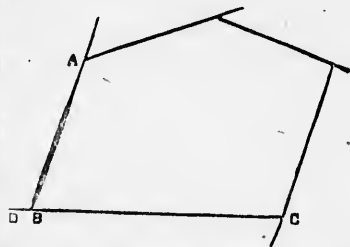
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3. Therefore, by the foregoing corollary, all the interior, with all the exterior angles of the figure, are equal to all the interior angles of the figure, together with four right angles.

4. Take away the interior angles of the figure which are common to both, and we find that the exterior angles of the figure remaining on one side are equal to the four right angles remaining on the other.



5. Therefore all the exterior angles of any rectilinear figure are equal to four right angles.

PROPOSITION 28.—THEOREM.

The straight lines which join the extremities of two equal and parallel straight lines towards the same parts, are also themselves equal and parallel.

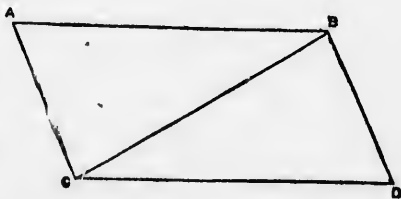
HYPOTHESIS.—Let AB and CD be equal and parallel straight lines, joined towards the same parts by the straight lines AC, BD.

SEQUENCE.—AC and BD shall also be equal and parallel.

CONSTRUCTION.—Join BC.

DEMONSTRATION.—1. Because AB is parallel to CD, and BC meets them, the alternate angles ABC, BCD, are equal. (*Proposition 29, Book I.*)

2. Because AB is equal to CD, and BC common to the two triangles, ABC, DCB, the two sides AB, BC, are equal to the two sides BC, CD, each to each.



3. And the angle ABC is equal to the angle BCD (*Demonstration 1.*)