

It involves the existence of a complete differential of the functions  $u$  and  $v$ . Cf. Stolz, *Differential und Integralrechnung*, vol. 1, ch. 4, § 8 and vol. 2, ch. 12, § 7.

To test the truth of a general theorem one mode of procedure is to form an example which proves the theorem to be false. From the foregoing it appears that in the present case simpler examples are surely impossible than those

(a) in which  $f'(z)$  becomes discontinuous along a curve whose tangent does not turn continuously along any arc ;\*

(b) in which,  $f'(z)$  being assumed to remain finite in  $T$ ,  $f'(z)$  becomes discontinuous in a Cantor's set of positive content ;

(c) in which not both of the partial derivatives  $\frac{\partial u}{\partial x}$ ,  $\frac{\partial u}{\partial y}$  are capable of surface integration over any region lying in  $T$ , or of line integration along a line parallel to one of the coördinate axes.

HARVARD UNIVERSITY,  
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## THE FIFTIETH ANNIVERSARY MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE semi-centennial meeting of the American Association for the Advancement of Science was held in Boston, August 22-27. There were over 900 members and associates registered. A large number of members of affiliated societies were also in attendance, many of whom did not register, but had the privilege of taking part in the proceedings of the sections in which they were interested. Their presence increased the general scientific interest ; and it was the evident desire of the various sections to have still closer relations with the respective affiliated societies, as it is felt that any tendency towards the isolation of groups of specialists may partially defeat one of the objects the Association has at heart, viz., the spread of a popular interest in the work of scientific men.

The section of mathematics and astronomy, and its near neighbor, the physical section, were well attended, the

\* It is possible that by analysis similar to Jordan's, *Cours d'Analyse*, vol. 1, § § 193-196, this condition may be made more general.