The Function of Mathematics in Scientific Research

Mathematics embodies some of the earliest scientific developments and hence she was practically unrestricted in regard to the selection of her location in what became later the domain of science. Did she select for herself the most fertile available land or was she misled by superficial attractions in making her choice, while the richest mines were hidden under other land whose surface presented fewer attractions and whose development demanded more complicated machinery? One might naturally expect different answers to this question from the members representing the varied interests of this Science Club.

It is not our purpose to extoll the advantages of location with respect to the mathematical mine. This location was pointed out to you in your youth and the impressions which it has left on your minds are too deep to be modified materially by a few general remarks. Moreover, some of the tunnels of the mathematical mine are used daily by many of you, who gladly speed through them for the purpose of saving time to employ your energies more effectively in the field of your own choice.

Notwithstanding these facts, all will agree that the mathematical mine has been developed extensively, and that its developments have been most helpful and are becoming more useful to various other sciences. As the rivers excavated unknowingly for possible railroad lines through the mountains...
Editor's Summary