



DIVISION OF
CORPORATION FINANCE
Mail Stop 3561

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

May 7, 2010

By Facsimile and U.S. Mail

Mr. R.L. Jadin
Chief Financial Officer
W.W. Grainger, Inc.
100 Grainger Parkway
Lake Forest, IL 60045-5201

Re: W.W. Grainger, Inc.
Form 10-K for the year ended December 31, 2009
Filed February 25, 2010
File No. 1-05684

Dear Mr. Jadin:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Andrew Mew
Accounting Branch Chief