



DIVISION OF
CORPORATION FINANCE

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

June 17, 2011

Via Email

Gregory S. Irving
Vice President and Controller
W.W. Grainger, Inc.
100 Grainger Parkway
Lake Forest, Illinois 60045-5201

Re: W.W. Grainger, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2010
Filed February 28, 2011
Definitive Proxy Statement on Schedule 14A
Filed March 18, 2011
File No. 001-05684

Dear Mr. Irving:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Christopher F. Chase for

H. Christopher Owings
Assistant Director