

ANDERSON BRIAN P
 Form 4
 February 03, 2011

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 ANDERSON BRIAN P

2. Issuer Name and Ticker or Trading Symbol
 GRAINGER W W INC [GWW]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
 100 GRAINGER PARKWAY
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 02/02/2011

Director 10% Owner
 Officer (give title below) Other (specify below)

LAKE FOREST, IL 60045-5201
 (City) (State) (Zip)

4. If Amendment, Date Original Filed (Month/Day/Year)

6. Individual or Joint/Group Filing (Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|---|
| | | | Code | V | Amount | (D) | Price |
| Common Stock | 02/02/2011 | | M | | 1,980 | A | \$ 45.5 6,320 |
| Common Stock | 02/02/2011 | | S | | 802 | D | \$ 131.196 5,518 |
| Common Stock | 02/02/2011 | | S | | 457 | D | \$ 131.22 5,061 |
| Common Stock | 02/02/2011 | | S | | 200 | D | \$ 131.23 4,861 |
| Common Stock | 02/02/2011 | | S | | 200 | D | \$ 131.24 4,661 |
| | 02/02/2011 | | S | | 121 | D | \$ 131.27 4,540 |

Common
Stock

Common Stock 02/02/2011 S 100 D \$ 131.2763 4,440 D

Common Stock 02/02/2011 S 100 D \$ 131.29 4,340 D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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(9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | 8. Amount or Number of Shares |
|--|--|--------------------------------------|--|--------------------------------|--|--|---|-------------------------------|
| Stock Units | <u>(1)</u> | | | | | <u>(2)</u> <u>(2)</u> | Common Stock | 10,339 |
| Stock Option | \$ 54.61 | | | | | 04/24/2002 04/23/2012 | Common Stock | 1,650 |
| Stock Option | \$ 45.5 | 02/02/2011 | | M | 1,980 | 04/30/2003 04/29/2013 | Common Stock | 1,980 |
| Stock Option | \$ 54.14 | | | | | 04/28/2004 04/27/2014 | Common Stock | 1,670 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| ANDERSON BRIAN P 100 GRAINGER PARKWAY LAKE FOREST, IL 60045-5201 | X | | | |

Signatures

Cristen L. Kogl, as
attorney-in-fact

02/03/2011

__Signature of Reporting Person

Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) 1-for-1

(2) The stock units are expected to settle in cash following termination of service as a director.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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