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

Schedule 13G

Under the Securities Exchange Act of 1934 (Amendment No. 18)*

A. O. SMITH CORPORATION (Name of Issuer)

Class A Common Stock, \$5.00 par value (Title of Class of Securities)

831-865-10-0 (CUSIP Number)

Check the following box if a fee is being paid with this statement /_/. (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on following page(s))

CUSIP No. 831-865-10-0

1 NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

> Smith Investment Company IRS ID #39-6043416 Lloyd B. Smith SS ###-##-### Arthur O. Smith SS ###-##-###

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

Not Applicable

- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

Smith Investment Company - Nevada

Lloyd B. Smith - United States
Arthur O. Smith - United States

NUMBER OF 5 SOLE VOTING POWER

SHARES Smith Investment Company - 5,378,168

BENEFICIALLY 6 SHARED VOTING POWER

OWNED BY -0-

EACH 7 SOLE DISPOSITIVE POWER

REPORTING Smith Investment Company - 5,378,168

PERSON 8 SHARED DISPOSITIVE POWER

WITH -0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

- 5,378,168 - 0 Smith Investment Company

Lloyd B. Smith - 0 Arthur O. Smith

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* 10

> Lloyd B. Smith /x/ Arthur O. Smith /x/

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

> Smith Investment Company - 92.4% Lloyd B. Smith - 0% - 0% Arthur O. Smith

TYPE OF REPORTING PERSON* 12

> Smith Investment Company Lloyd B. Smith - IN Arthur O. Smith - IN

^{*} SEE INSTRUCTIONS BEFORE FILLING OUT!

Item 1(a) Name of Issuer:

A. O. Smith Corporation

Item 1(b) Address of Issuer's Principal Executive Officers:

11270 West Park Place Milwaukee, Wisconsin 53224

Item 2(a) Name of Person Filing:

Smith Investment Company I.R.S. I.D. No. 39-6043416 Lloyd B. Smith -- S.S. No. ###-### Arthur O. Smith -- S.S. No. ###-####

Item 2(b) Address of Principal Business Office or, if note, Residence:

Smith Investment Company 11270 West Park Place Milwaukee, Wisconsin 53224

Lloyd B. Smith 11270 West Park Place Milwaukee, Wisconsin 53224

Arthur O. Smith 11270 West Park Place Milwaukee, Wisconsin 53224

Item 2(c) Citizenship

Nevada -- Smith Investment Company United States -- Lloyd B. Smith and Arthur O. Smith

Item 2(d) Title of Class or Securities:

Class A Common Stock, \$5.00 par value

Item 2(e) CUSIP Number

831-865-10-0

Item 3 If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b), check whether the person filing is a:

Not applicable

Item 4. Ownership

As of December 31, 1997, Smith Investment Company owned 5,378,168 shares of A. O. Smith Corporation Class A Common Stock or approximately 92.4% of the outstanding stock. Smith Investment Company has sole power to vote and dispose of such shares.

Mr. Arthur O. Smith is Chairman and Chief Executive Officer and a director of Smith Investment Company; During 1993, Mr. Lloyd B. Smith retired as Vice President and a director of Smith Investment Company.

On December 31, 1997, Arthur O. Smith owned beneficially 118,445 shares, and his wife owned of record and beneficially 3,485 shares of the outstanding capital stock of Smith Investment Company ("SICO") and 199,130 shares were held in various trusts for the benefit of the wife and issue of Arthur O. Smith. On December 31, 1997, Lloyd B. Smith owned beneficially 962 shares of the outstanding capital stock of SICO and 312,043 shares were held in various trusts for the benefit of the wife and issue of Lloyd B. Smith. In addition,

Messrs. Smith were trustees of various trusts for the benefit of persons other than themselves, their wives and issue, which trusts held an aggregate of 501,910 shares of the capital stock of SICO outstanding on December 31, 1997. Messrs. Smith have shared investment and voting power on all trusts for which they are co-trustees. On all other trusts one or the other shares

trust powers with at least one other person. The shares of capital stock of SICO held beneficially by Messrs. Smith and their wives, together with shares held by Messrs. Smith in trust for others comprised 68.5% of the 1,658,533 outstanding shares of capital stock of SICO on December 31, 1997. Messrs. Smith disclaim that any of the foregoing interests in the capital stock of SICO constitute beneficial ownership of any Class A Common Stock of A. O. Smith Corporation.

Item 5 Ownership of Five Percent or Less of a Class:

Not applicable

Item 6 Ownership of More than Five Percent on Behalf of Another Person:

Not applicable

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company:

Not applicable

Item 8 Identification and Classification of Members of the Group:

Not applicable

Item 9 Notice of Dissolution of Group:

Not applicable

Item 10 Certification

Not applicable

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

SMITH INVESTMENT COMPANY

/s/ Arthur O. Smith Arthur O. Smith, Chairman & CEO January 22, 1998

/s/ Lloyd B. Smith Lloyd B. Smith January 22, 1998

/s/ Arthur O. Smith Arthur O. Smith January 22, 1998