

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 11-K

Annual Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934 [No Fee Required]

For the fiscal year ended December 31, 2003

Or

Transition Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934 [No Fee Required] For the transition period from _____ to _____.

Commission file number (of issuer): 1-5667

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

Cabot Retirement Savings Plan

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Cabot Corporation
Two Seaport Lane, Suite 1300
Boston, Massachusetts 02210-2019

REQUIRED INFORMATION

The following financial statements and schedules have been prepared in accordance with the financial reporting requirements of the Employee Retirement Income Security Act of 1974, as amended:

1. Statement of Net Assets Available for Plan Benefits, as of December 31, 2003 and 2002.
2. Statement of Changes in Net Assets Available for Plan Benefits, for the year ended December 31, 2003.
3. Notes to Financial Statements.
4. Supplemental Schedule – Schedule of Assets (Held at Year-End).

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Cabot Retirement Savings Plan
(Name of Plan)

Date: June 28, 2004

/s/ John A. Shaw

John A. Shaw
Executive Vice President and
Chief Financial Officer

Cabot Retirement Savings Plan Index December 31, 2003 and 2002

	<u>Page(s)</u>
Report of Independent Registered Public Accounting Firm Financial Statements	1
Statements of Net Assets Available for Plan Benefits	2–3
Statement of Changes in Net Assets Available for Plan Benefits	4
Notes to Financial Statements	5–11
Supplemental Schedule— Schedule of Assets (Held at End of Year)*	12
EX-23 Consent of PricewaterhouseCoopers LLP	

* Other supplemental schedules required by 29 CFR 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA have been omitted because they are not applicable.

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator
of the Cabot Retirement Savings Plan:

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of the Cabot Retirement Savings Plan (the "Plan") at December 31, 2003 and 2002, and the changes in net assets available for benefits for the year ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets (held at end of year) as of December 31, 2003 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
June 25, 2004

[Table of Contents](#)**Cabot Retirement Savings Plan**
Statement of Net Assets Available for Plan Benefits
As of December 31, 2003

	<u>Allocated</u>	<u>Unallocated</u>	<u>Total</u>
Assets			
Investments, at fair value	\$315,396,787	\$138,437,704	\$453,834,491
Participant loans receivable	2,356,969	—	2,356,969
Employer contribution receivable	891,875	—	891,875
Total assets	<u>318,645,631</u>	<u>138,437,704</u>	<u>457,083,335</u>
Liabilities			
Current portion of notes payable	—	3,195,802	3,195,802
Long-term portion of notes payable	—	44,330,169	44,330,169
Total liabilities	<u>—</u>	<u>47,525,971</u>	<u>47,525,971</u>
Net assets available for plan benefits	<u>\$318,645,631</u>	<u>\$ 90,911,733</u>	<u>\$409,557,364</u>

The accompanying notes are an integral part of these financial statements.

[Table of Contents](#)**Cabot Retirement Savings Plan**
Statement of Net Assets Available for Plan Benefits
As of December 31, 2002

	<u>Allocated</u>	<u>Unallocated</u>	<u>Total</u>
Assets			
Investments, at fair value	\$259,841,734	\$126,931,967	\$386,773,701
Participant loans receivable	2,408,886	—	2,408,886
Employer contribution receivable	1,281,276	—	1,281,276
Total assets	<u>263,531,896</u>	<u>126,931,967</u>	<u>390,463,863</u>
Liabilities			
Current portion of notes payable	—	2,944,048	2,944,048
Long-term portion of notes payable	—	47,525,971	47,525,971
Total liabilities	<u>—</u>	<u>50,470,019</u>	<u>50,470,019</u>
Net assets available for plan benefits	<u>\$263,531,896</u>	<u>\$ 76,461,948</u>	<u>\$339,993,844</u>

The accompanying notes are an integral part of these financial statements.

[Table of Contents](#)**Cabot Retirement Savings Plan
Statement of Changes in Net Assets Available for Plan Benefits
For the year ended December 31, 2003**

	<u>Allocated</u>	<u>Unallocated</u>	<u>Total</u>
Additions			
Interest and dividend income	\$ 5,144,257	\$ 2,445,862	\$ 7,590,119
Net appreciation (depreciation) in fair value of investments	51,500,621	23,778,672	75,279,293
Share allocation of Cabot Corporation common and preferred stock, at fair value	9,934,204	—	9,934,204
Employer contributions	3,364,779	2,253,461	5,618,240
Employee contributions	10,678,731	—	10,678,731
Total additions	<u>80,622,592</u>	<u>28,477,995</u>	<u>109,100,587</u>
Additions			
Benefits paid to participants	25,508,857	—	25,508,857
Interest expense	—	4,094,006	4,094,006
Share allocation of Cabot Corporation common and preferred stock, at fair value	—	9,934,204	9,934,204
Total deductions	<u>25,508,857</u>	<u>14,028,210</u>	<u>39,537,067</u>
Net increase	55,113,735	14,449,785	69,563,520
Net assets available for plan benefits			
Beginning of year	263,531,896	76,461,948	339,993,844
End of year	<u>\$318,645,631</u>	<u>\$90,911,733</u>	<u>\$409,557,364</u>

The accompanying notes are an integral part of these financial statements.

**Cabot Retirement Savings Plan
Note to Financial Statements**

1. Description of the Plan

General

Cabot Corporation (the Company) initially adopted the Cabot Corporation Employee Stock Ownership Plan (the ESOP) in 1988. As of December 31, 2000, the Cabot Retirement Incentive Savings Plan (the CRISP) and the Cabot Employee Savings Plan (the CESP) were merged with and into the ESOP. The combined amended and restated plan, a defined contribution plan, was renamed the Cabot Retirement Savings Plan (the Plan). The Plan is subject to the Employee Retirement Income Security Act of 1974 (ERISA).

The following brief description of the Plan is provided for general information purposes only. A detailed description of the Plan is available for inspection at principal locations of the Company.

Eligibility

All U.S. employees of the Company and its participating subsidiaries (except certain temporary and leased employees) are eligible to participate beginning on the later of the first day of employment or the date the employee is included in an employee group which participates. Company contributions, employee contributions and all earnings thereon are recorded in accounts set up for all eligible participants and are reflected as allocated assets in the statement of net assets available for plan benefits.

Employee Contributions

The participant may make contributions by means of a salary reduction arrangement to his or her account. Participants may elect to contribute, through a payroll deduction, amounts ranging up to 50% of their U.S. eligible compensation on a before-tax basis, an after-tax basis, or a combination thereof, subject to certain limitations under the Internal Revenue Code (the Code).

Employer Contributions

In addition to any discretionary contributions, the Company's contribution is primarily in the forms of (i) a matching contribution of shares in the Cabot common stock fund or the Cabot preferred stock fund (the basic employer match), and (ii) a Cabot preferred stock allocation. These contributions are calculated and recorded on the last business day of the calendar quarters.

Subject to certain collective bargaining agreements, the basic employer match is equal to 75% of a participant's eligible before-tax and after-tax contributions, up to 7.5% of the participant's eligible compensation.

The preferred stock allocation is comprised of a total quarterly allocation of 742,574 shares of preferred stock. The allocation to each participant is based on the value of Cabot preferred stock, the number of shares allocated as dividends and total eligible compensation. In instances where a participant allocation is less than 4% of eligible compensation, the Company is required to remit a contribution to provide for 4% minimum allocation. Subject to certain collective bargaining agreements, participant allocations greater than 8% of eligible compensation are used to fund the basic employer match. In the event that the total allocation amount also exceeds the basic employer match, the surplus is contributed to participants based on total eligible compensation. Subject to certain bargaining agreements, the allocation is made to each participant's account who is employed on that date or has retired, died or becomes totally and permanently disabled during the quarter.

Preferred stock to be allocated in future periods and held by the plan is reflected as unallocated assets in the statement of net assets available for plan benefits.

**Cabot Retirement Savings Plan
Note to Financial Statements**

As discussed in Note 5, the Company also remits debt service contributions to the Plan.

Funding Policy

The total addition to each participant's account shall not exceed the lesser of either 100% of the participant's U.S. compensation (as defined by the Code) or \$40,000.

Investments

The employee's contribution will be allocated, at the employee's election, to one or more of ten funds established for investment of Plan assets: Vanguard Index Trust — 500 Portfolio (Vanguard 500 Portfolio), a growth and income fund, invests in all of the stocks included in the Standard & Poor's (S&P) 500 index in approximately the same proportions as they are represented in the S&P 500 index; Vanguard Windsor II, also a growth and income fund, is comprised of common stocks that the investment manager believes are undervalued in the marketplace; Vanguard Wellington Fund, a balanced fund, invests in bonds and stocks that, in the opinion of the investment manager, provide relative stability of income and principal and potential growth of capital and income, respectively; Vanguard Fixed Income Securities Fund Short-Term Federal Portfolio (Vanguard Short-Term Federal Portfolio), is an income fund that invests primarily in short-term U.S. Government and agency securities with maturities from one to three years; Vanguard Money Market Reserves-Federal Portfolio (Vanguard Federal Portfolio) invests solely in securities with maturities of one year or less issued by the U.S. Treasury and agencies of the U.S. Government; Vanguard Explorer Fund invests primarily in common stocks of small companies that, in the opinion of the investment manager, provide favorable prospects for above-average growth in market value; Vanguard PRIMECAP Fund seeks long-term growth of capital by investing principally in a portfolio of common stocks; Vanguard International Growth Portfolio seeks to provide long-term growth of capital and diversification overseas by investing in the stock of companies located outside the United States; Vanguard Total Bond Market Index Fund seeks a high level of interest income by investing in a large sampling that matches key characteristics of the Lehman Brother Aggregate Bond Index, which is a widely recognized measure of the entire taxable U.S. bond market; and the Cabot Common Stock Fund, which invests primarily in Cabot common stock.

The preferred stock allocations are recorded in the Cabot Preferred Stock Fund, which invests primarily in Cabot preferred stock.

In addition, Plan participants have retained a stock dividend received during 2000, and the earnings thereon, in the Cabot Microelectronics Common Stock Fund, which invests primarily in Cabot Microelectronics common stock. The Plan does not allow participants to contribute to the Cabot Microelectronics Common Stock Fund.

Vesting

Each participant will at all times be 100% vested in his or her contributions. Effective January 1, 2002, all salaried participants will be vested in all company contributions and earnings thereon according to a five-year vesting schedule, which is 20% upon completion of two years of service, 40% upon completion of three years of service, 60% upon completion of four years of service, and 100% upon completion of five years of service. A participant's entire account balance becomes 100% vested and payable, upon the participant's attainment of age 65, upon the participant's early retirement (defined as age 55 with 10 years of service to the company), disability or death. Union members of the Plan are subject to their union vesting schedules.

**Cabot Retirement Savings Plan
Note to Financial Statements**

Benefits

The Plan requires, subject to certain collective bargaining agreements, all participant benefits to be paid in the form of a lump sum distribution.

A participant may also withdraw up to 100% of before-tax contributions, upon showing a financial hardship exists but only after the participant has withdrawn all other vested benefits from the Plan and the maximum loan has been made from the participant's account. Participants with after-tax contributions may elect to withdraw these amounts at any time.

If a participant leaves the Company for any other reason before retirement and his or her account balance is \$5,000 or less, he or she will receive in a lump sum distribution of the vested portion of his or her account balance.

A participant may elect to defer payment of a benefit until April 1 following the year that the participant reaches age 70 1/2.

Loans

Participants may obtain loans from the Plan in an amount not to exceed, in the aggregate, the lesser of \$50,000 or 50% of the total vested amounts in the participant's account. Each loan must be paid in full within five years through payroll deductions and is secured by the participant's remaining account balance. Interest is charged at reasonable rates as determined by the Benefits Committee of Cabot Corporation. Interest rates on outstanding loans as of December 31, 2003 ranged from 6.00% to 10.91%.

2. Summary of Significant Accounting Policies

Basis of Presentation

The financial statements of the Plan are prepared using the accrual method of accounting.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

Risk and Uncertainties

The Plan allows for various investment options (as selected by the Plan administrator) in any combination of stocks, bonds, fixed income securities, mutual funds and other investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for plan benefits.

**Cabot Retirement Savings Plan
Note to Financial Statements**

Investment Valuation

The preferred stock is valued by Duff and Phelps Capital Markets Co., an independent appraiser. The value of the preferred stock depends primarily on the Company's common stock value.

Investments in common stock traded on a national securities exchange are valued at the last reported sale price on the last business day of the year. Investments in mutual funds are valued at the net asset value as of the end of the year. The short-term investment funds are carried at cost which approximates market value. Participant loans are valued at cost which approximates fair value.

Investment Transactions

Purchases and sales of securities are reflected on a trade date basis. Gain or loss on sales of securities is based on average cost.

Dividend income is reported on the ex-dividend date. Interest income is recorded as earned on the accrual basis.

The Plan presents in the statement of changes in net assets the net realized and unrealized appreciation (depreciation) in the fair value of its investments which consists of realized gains or losses and unrealized appreciation or (depreciation) on those investments.

Benefit Payments

Benefits are recorded when paid.

3. Investments

The fair value of investments held by the Plan by general type are as follows:

	December 31,			
	2003		2002	
	Allocated	Unallocated	Allocated	Unallocated
Common stocks	\$ 53,795,239	\$ —	\$ 52,086,367	\$ —
Preferred stocks	103,674,023	138,437,704	90,392,994	126,931,967
Mutual funds	157,927,525	—	117,362,373	—
	<u>\$315,396,787</u>	<u>\$138,437,704</u>	<u>\$259,841,734</u>	<u>\$126,931,967</u>

[Table of Contents](#)**Cabot Retirement Savings Plan
Note to Financial Statements**

The fair value of investments held by the Plan that exceed 5% or more of net assets available for plan benefits as of December 31, 2003 and 2002 are as follows:

	December 31,			
	2003		2002	
	Allocated	Unallocated	Allocated	Unallocated
Vanguard Windsor II Fund	\$ 21,500,922	\$ —	\$15,463,200	\$ —
Vanguard Wellington Fund	25,851,010	—	20,571,579	—
Cabot Common Stock Fund	42,999,762	—	39,148,257	—
Cabot Preferred Stock Fund	103,674,023	138,437,704	90,392,994	126,931,967
Vanguard 500 Portfolio Fund	40,677,017	—	29,539,841	—
Vanguard PRIMECAP Fund	20,935,326	—	12,969,770	—

The net appreciation (depreciation) in fair value of investments for the years ended December 31, 2003 and 2002 was as follows:

	2003	2002
Common stocks	\$ 8,557,277	\$ (23,016,503)
Preferred stocks	41,575,981	(77,738,106)
Mutual fund	25,146,035	(21,484,213)
Total	<u>\$75,279,293</u>	<u>\$ (122,238,822)</u>

Each share of the preferred stock is convertible into shares of the Company's common stock, subject to certain events and anti-dilution adjustment provisions, and carries voting rights on an "as converted" basis. The conversion rate for one share of preferred stock to common stock was 146.3782 as of December 31, 2003 and 2002.

On or after November 19, 1991, the Company has the right to cause the trustee to redeem preferred shares. Such shares shall be redeemed at their redemption price, and may be redeemed by the Company for cash, shares of the Company's common stock, or a combination thereof at the Company's option. As of December 31, 2003, the redemption price is \$1,000 per share. In addition to the redemption price, any accrued and unpaid dividends will become payable on the redemption date.

The issued shares of preferred stock are entitled to receive preferential and cumulative quarterly dividends and rank as to dividends and liquidation prior to the Company's Series A Junior Participating Preferred Stock and common stock.

**Cabot Retirement Savings Plan
Note to Financial Statements**

4. Notes Payable

Long-term debt consisted of the following:

	December 31,	
	2003	2002
Note due 2013, 8.29%	\$47,525,971	\$50,470,019

In November 1988, the Plan borrowed \$75,000,000 from an institutional lender in order to finance its purchase of 75,000 shares of the Company's Series B ESOP Convertible Preferred Stock. This debt accrues interest at a rate of 8.29% per annum, and is to be repaid in equal quarterly installments with final payment due on December 31, 2013. This debt is guaranteed by the assets in the unallocated fund and the Company.

The aggregate principal amounts of long-term debt due for the next five fiscal years and thereafter are as follows:

Year ended December 31, 2004	\$ 3,195,802
2005	3,469,084
2006	3,765,736
2007	4,087,755
2008	4,437,311
Thereafter	28,570,283

5. Debt Service Contributions

The Company contributes to the Plan on a quarterly basis the deficiency between dividends earned on the leveraged preferred stock and the payment due by the Plan to the lender. These debt service contributions are recorded as unallocated employer contributions.

6. Forfeitures

Upon termination of a participant from the Plan before being fully vested, the nonvested portion of the Company contributions is forfeited. The Plan allows the Company to offset company contributions with participant forfeitures. During 2003, the Company utilized \$615,000 of participant forfeitures. As of December 31, 2003, available participant forfeitures totaled \$45,943 and are recorded in the statement of net assets available for plan benefits.

7. Administrative Expenses

All administrative expenses associated with the operation of the Plan were paid by the Company during the year ended December 31, 2003. However, under the terms of the Plan, such costs may be charged to the Plan.

**Cabot Retirement Savings Plan
Note to Financial Statements**

8. Tax Status

In a letter dated September 2, 2003, the Internal Revenue Service advised the Company of its favorable determination with respect to the qualified status of the Plan, as amended and restated, under the Code. The Plan is intended to qualify as a profit sharing plan under section 401(a) of the Code that contains a stock bonus feature constituting an employee stock ownership plan under section 4975(e) of the Code. The plan administrator and counsel believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the code. Therefore, no provision for income tax has been accrued.

9. Plan Termination

The Plan was established with the intention that it will continue indefinitely. However, the Company reserves the right to suspend its contributions or to terminate the Plan at any time. In the event the Plan is terminated, all participants become 100% vested and the assets of the Plan, after payment of any expenses, taxes or proper charges of the trustee, will be allocated in accordance with the provisions of ERISA.

10. Party-In-Interest

The Plan's investment options include certain mutual funds of The Vanguard Group. Vanguard Fiduciary Trust Company is a trustee of the Plan's assets and, therefore, these transactions qualify as party-in-interest transactions. In addition, the Plan invests in common and preferred stock of the plan sponsor and these transactions qualify as party-in-interest transactions. Finally, the Plan provides loans to certain participants which also qualify as party-in-interest transactions.

**Cabot Retirement Savings Plan
Schedule of Assets (Held at End of Year)**

Description of Investment	Cost	Shares/Units Held	Current Value
Preferred stock of Cabot Corporation*	\$ 75,121,672	10,874,427	\$242,111,727
Common stock of Cabot Corporation*	26,972,834	4,633,595	42,999,762
Common stock of Cabot Microelectronic Corporation	10,535,796	1,318,129	10,795,477
Vanguard 500 Portfolio Fund*	42,129,124	396,192	40,677,017
Vanguard Explorer Fund*	11,134,791	195,703	12,842,019
Vanguard Federal Portfolio Fund*	16,401,896	16,401,896	16,401,896
Vanguard International Growth Portfolio Fund*	4,138,638	268,310	4,327,840
Vanguard PRIMECAP Fund*	20,167,378	394,708	20,935,326
Vanguard Short-term Federal Portfolio*	9,144,865	872,631	9,232,440
Vanguard Total Bond Market Index Fund*	6,146,985	597,387	6,159,055
Vanguard Wellington Fund*	24,949,303	897,293	25,851,010
Vanguard Windsor II Fund*	20,945,007	811,662	21,500,922
Participant Loans — stated interest rates ranging from 6.00% - 10.91%*	2,356,969	N/A	2,356,969
Total investments	<u>\$270,145,258</u>	<u>37,661,933</u>	<u>\$456,191,460</u>

*Party-in-interest

[Table of Contents](#)

Exhibit Index

Exhibit Number

Exhibit 23 — Consent of Registered Public Accounting Firm.

CONSENT OF REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-19103 and 333-19099) of Cabot Corporation of our report dated June 25, 2004 relating to the financial statements of the Cabot Retirement Savings Plan, which appears in this Form 11-K.

/s/ PricewaterhouseCoopers LLP

Boston, MA
June 28, 2004