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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

ANNUAL FILING

CABOT CORPORATION			
(NAME OF ISSUER)			
COMMON STOCK			
(TITLE CLASS OF SECURITIES)			
127055101			
(CUSIP NUMBER)			
12/31/2000			
(DATE OF EVENT WHICH REQUIRES FILING THIS STATEMENT)			

CHECK THE APPROPRIATE BOX TO DESIGNATE THE RULE PURSUANT TO WHICH THIS SCHEDULE IS FILED:

(X)	RULE	13D-1(B)
()	RULE	13D-1(C)
()	RULE	13D-1(D)

*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).

CUSIP NO. 127055101 13G PAGE 2 OF 5 PAGES

- 1. NAME OF REPORTING PERSON
 S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON
 STATE STREET BANK AND TRUST COMPANY, ACTING IN VARIOUS FIDUCIARY
 CAPACITIES. 04-1867445
- 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP.*

NOT APPLICABLE A ____ B ___

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

BOSTON, MASSACHUSETTS

- 5. SOLE VOTING POWER 632,775 SHARES
- 6. SHARED VOTING POWER 8,845,796 SHARES (INCLUDES 61,379 CONV.PFD SHARES. 1 PFD = 87.47 COM).
- 7. SOLE DISPOSITIVE POWER 660,361 SHARES

SHARED DISPOSITIVE POWER 7,114,771 SHARES (INCLUDES 61,379 CONV.PFD SHARES. 1 PFD = 87.47 COM). AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9,528,771 SHARES (INCLUDES 61,379 CONV.PFD SHARES. 1 PFD = 87.47 COM). 10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* NOT APPLICABLE 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 12. TYPE OF REPORTING PERSON* BK SCHEDULE 13G PAGE 3 OF 5 PAGES ITEM 1. (A) NAME OF ISSUER CABOT CORPORATION (B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 2 SEAPORT LANE **SUITE 1300** BOSTON, MA 02110-2019 ITEM 2. (A) NAME OF PERSON FILING STATE STREET BANK AND TRUST COMPANY (A WHOLLY OWNED SUBSIDIARY OF STATE STREET CORPORATION) (B) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 225 FRANKLIN STREET, BOSTON, MA 02110 (C) CITIZENSHIP BOSTON, MASSACHUSETTS TITLE CLASS OF SECURITIES (D) COMMON STOCK CUSIP NUMBER (E) 127055101 ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A: (B) _X_ BANK AS DEFINED IN SECTION 3(A)(6) OF THE ACT PAGE 4 of 5 **PAGES** ITEM 4. OWNERSHIP (A) AMOUNT BENEFICIALLY OWNED 9,528,771 SHARES (B) PERCENT OF CLASS 13.2% (C) NUMBER OF SHARES AS TO WHICH SUCH PERSON HAS: (I) SOLE POWER TO VOTE OR TO DIRECT THE VOTE OF

632,775 SHARES

660,361 SHARES

8,845,796 SHARES

(II) SHARED POWER TO VOTE OR TO DIRECT THE VOTE OF

(III) SOLE POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF

(IV) SHARED POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF

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.

CABOT RETIREMENT INCENTIVE SAVINGS PLAN = 9.8%

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

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ITEM 10. CERTIFICATION

THE FOLLOWING CERTIFICATION SHALL BE INCLUDED IF THE STATEMENT IS FILED PURSUANT TO RULE 13D-1(B):

BY SIGNING BELOW I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE SECURITIES REFERRED TO ABOVE WERE ACQUIRED IN THE ORDINARY COURSE OF BUSINESS AND WERE NOT ACQUIRED FOR THE PURPOSE OF AND DO NOT HAVE THE EFFECT OF CHANGING OR INFLUENCING THE CONTROL OF THE ISSUER OF SUCH SECURITIES AND WERE NOT ACQUIRED IN CONNECTION WITH OR AS A PARTICIPANT IN ANY TRANSACTION HAVING SUCH PURPOSES OR EFFECT.

THIS REPORT IS NOT AN ADMISSION THAT STATE STREET BANK AND TRUST COMPANY IS THE BENEFICIAL OWNER OF ANY SECURITIES COVERED BY THIS REPORT, AND STATE STREET BANK AND TRUST COMPANY EXPRESSLY DISCLAIMS BENEFICIAL OWNERSHIP OF ALL SHARES REPORTED HEREIN PURSUANT TO RULE 13D-4.

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.

9 FEBRUARY 2001

STATE STREET CORPORATION STATE STREET BANK AND TRUST COMPANY, TRUSTEE

/s/ SUSAN C. DANIELS VICE PRESIDENT