UNITED STATES 12/31/97 SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934 (AMENDMENT NO. 8)*

CABOT CORPORATION
(NAME OF ISSUER)
COMMON STOCK
(TITLE CLASS OF SECURITIES)
127055101
(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).

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, TRUSTEE
CABOT RETIREMENT INCENTIVE SAVINGS PLAN

04-1867445

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

NOT APPLICABLE

A _

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

- 5. SOLE VOTING POWER 0 SHARES
- SHARED VOTING POWER 1,772,664 SHARES
- 7. SOLE DISPOSITIVE POWER 0 SHARES
- 8. SHARED DISPOSITIVE POWER 1,772,664 SHARES

- AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,772,664 SHARES
- 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

CUSIP NO. 127055101

13G

PAGE 2A OF 5 PAGES

1. NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON STATE STREET BANK AND TRUST COMPANY, TRUSTEE 04-1867445 CABOT CORPORATION EMPLOYEE STOCK OWNERSHIP PLAN

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

NOT APPLICABLE

Α ___

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

- SOLE VOTING POWER 0 SHARES
- SHARED VOTING POWER 6,173,890.41 SHARES (REPRESENTS 68,103 CONV PFD SHS CONVERTED TO COM [RATIO 1 PFD = 87.47 COM] PLUS 216,921 COM SHS IN ESOP PORTION)
- SOLE DISPOSITIVE POWER

0 SHARES

SHARED DISPOSITIVE POWER 6,173,890.41 SHARES (REPRESENTS 68,103 CONV PFD SHS CONVERTED TO

COM [RATIO 1 PFD = 87.47 COM] PLUS 216,921 COM SHS IN ESOP PORTION)

- 9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 6,173,890.41 SHARES (REPRESENTS 68,103 CONV PFD SHS CONVERTED TO COM [RATIO 1 PFD = 87.47 COM] PLUS 216,921 COM SHS IN ESOP PORTION)
- 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

1. NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON STATE STREET BANK AND TRUST COMPANY, TRUSTEE 04-1867445 OR DISCRETIONARY ADVISOR VARIOUS COLLECTIVE INVESTMENT FUNDS FOR EMPLOYEE BENEFIT PLANS AND OTHER INDEX ACCOUNTS CABOT

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

NOT APPLICABLE

Α ___

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

- 5. SOLE VOTING POWER 358,834 SHARES
- 6. SHARED VOTING POWER 0 SHARES
- 7. SOLE DISPOSITIVE POWER 364,734 SHARES
- 8. SHARED DISPOSITIVE POWER 0 SHARES
- 9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 364,734 SHARES
- 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 .5%
- 12. TYPE OF REPORTING PERSON* BK

1. NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON STATE STREET BANK AND TRUST COMPANY, TRUSTEE/CO-TRUSTEE 04-1867445 VARIOUS PERSONAL TRUST ACCOUNTS

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

NOT APPLICABLE

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

- 5. SOLE VOTING POWER 529,102 SHARES
- SHARED VOTING POWER 1,527,600 SHARES
- 7. SOLE DISPOSITIVE POWER 72,948 SHARES
- 8. SHARED DISPOSITIVE POWER 1,983,754 SHARES
- 9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,056,702 SHARES
- 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 2.8%
- 12. TYPE OF REPORTING PERSON* BK

ITEM 1.

(A) NAME OF ISSUER

CABOT CORPORATION

(B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

75 STATE STREET BOSTON, MA 02109

ITEM 2.

(A) NAME OF PERSON FILING

STATE STREET BANK AND TRUST COMPANY (A WHOLLY OWNED SUBSIDIARY OF STATE STREET BOSTON CORPORATION)

(B) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE

225 FRANKLIN STREET, BOSTON, MA 02110

(C) CITIZENSHIP

BOSTON, MASSACHUSETTS

(D) TITLE CLASS OF SECURITIES

COMMON STOCK

(E) CUSIP NUMBER

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

ITEM 4. OWNERSHIP

(A) AMOUNT BENEFICIALLY OWNED

10,317,990.41 SHARES

(B) PERCENT OF CLASS

14%

- (C) NUMBER OF SHARES AS TO WHICH SUCH PERSON HAS:
 - (I) SOLE POWER TO VOTE OR TO DIRECT THE VOTE 887,936 SHARES
 - (II) SHARED POWER TO VOTE OR TO DIRECT THE VOTE 9,424,154.41 SHARES
 - (III) SOLE POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF 437,682 SHARES
 - (IV) SHARED POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF 9,880,308.41 SHARES
- 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

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.

10 FEBRUARY 1998

STATE STREET BOSTON CORPORATION STATE STREET BANK AND TRUST COMPANY, TRUSTEE

/s/ Mary Sue Spain SENIOR COMPLIANCE ADMINISTRATOR