UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

CABOT CORPORATION

(Exact name of registrant as specified in its charter)

Delaware 04-2271897
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

Two Seaport Lane
Suite 1300
Boston, MA 02210
(Address of principal executive offices) (Zip Code)

Cabot Corporation 2017 Long-Term Incentive Plan (Full title of the plan)

Brian A. Berube, Esq.
Senior Vice President and General Counsel
Two Seaport Lane
Suite 1300
Boston, MA 02210
(Name and address of agent for service)

 $\begin{tabular}{ll} 617\mbox{-}345\mbox{-}0100 \\ (Telephone number, including area code, of agent for service) \\ \end{tabular}$

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer		Accelerated filer	
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, Par Value \$1.00 per share	5,375,000 shares	\$57.98(2)	\$311,642,500(2)	\$36,120

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, this registration statement also covers such additional shares of Common Stock as may become issuable under the plans to prevent dilution from stock splits, stock dividends and similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Common Stock as reported on the New York Stock Exchange on March 9, 2017.

PART 1 INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

Item 1. Plan Information.

The information required by Item 1 will be included in documents sent or given to participants in the plan covered by this registration statement pursuant to Rule 428(b)(1) under the Securities Act of 1933, as amended (the "Securities Act").

Item 2. Registrant Information and Employee Plan Annual Information.

The written statement required by Item 2 will be included in documents sent or given to participants in the plan covered by this registration statement pursuant to Rule 428 (b)(1) under the Securities Act.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), by Cabot Corporation (the "Registrant") (Commission File No. 1-5667) are incorporated in this Registration Statement by reference and shall be deemed to be a part hereof:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2016, as filed with the Commission on November 23, 2016;
- (b) The Registrant's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2016, as filed with the Commission on February 7, 2017:
- (c) The Registrant's Current Report on Form 8-K as filed with the Commission on March 14, 2017; and
- (d) The description of the Registrant's Common Stock, \$1.00 par value per share, contained in the Registrant's Registration Statement on Form 10, filed with the Commission pursuant to Section 12 of the Exchange Act.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated herein by reference from the date of filing of such documents. Any statement contained in this Registration Statement, in an amendment hereto or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Brian A. Berube, the Registrant's Senior Vice President and General Counsel, has opined as to the legality of the issuance of the Common Stock being registered under this Registration Statement. At the time of rendering his opinion, Mr. Berube had a substantial interest in the Registrant, as defined by the rules of the Commission, in that the fair market value of the shares of Common Stock he owned or that were issuable to him upon his exercise of options to acquire Common Stock, exceeded \$50,000. It is anticipated that additional shares and stock options will be issued to Mr. Berube pursuant to the 2017 Long-Term Incentive Plan and under other employee benefit plans of the Registrant.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law, as amended, provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. Section 145 further provides that a corporation similarly may indemnify any such person serving in any such capacity who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor, against expenses actually and reasonably incurred in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation unless and only to the extent that the Delaware Court of Chancery or such other court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other cour

Section 102(b)(7) of the Delaware General Corporation Law, as amended, permits a corporation to include in its certificate of incorporation a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided, however, that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law (relating to unlawful payment of dividends and unlawful stock purchase and redemption) or (iv) for any transaction from which the director derived an improper personal benefit.

Article Eighth (j) of the Registrant's Certificate of Incorporation and Section 14 of the Registrant's by-laws provide that the Registrant shall indemnify any person who was a party, is a party or is threatened to be made a party to any threatened, pending or completed action, suit, or proceeding by reason of the fact that such person is or was a director, officer, employee or agent of the Registrant or is or was serving at the request of the Registrant as a director, officer, employee or agent of another company or enterprise, including service as a fiduciary of an employee benefit plan, against expenses (including attorneys' fees), judgments, fines, penalties and amounts paid in settlement incurred in connection with such action, suit or proceeding to the extent permitted from time to time under the Delaware General Corporation Law. Such indemnification shall be made as authorized in a specific case upon a determination by the Board of Directors or the stockholders of the Registrant. The rights of indemnification are not exclusive of any other rights to which those seeking indemnification may be entitled and shall continue as to a person who ceases to be a director, officer, employee or agent. In addition, under Article Eighth (i) of the Registrant's Certificate of Incorporation no director or officer of the Registrant shall be liable to the Registrant or its stockholders for monetary damages for any breach of fiduciary duty, except to the extent that Delaware General Corporation Law prohibits the elimination or limitation of liability of directors or officers for breach of fiduciary duty.

All of the Registrant's directors and officers are covered by insurance policies maintained by the Registrant against specified liabilities for actions taken in their capacities as such, including liabilities under the Securities Act.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit <u>Number</u>	Document Description
4.1	Restated Certificate of Incorporation of Cabot Corporation effective January 9, 2009 (incorporated herein by reference to Exhibit 3.1 of Cabot's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2008, File No. 1-5667, filed with the Commission on February 9, 2009).
4.2	The By-laws of Cabot Corporation as amended January 8, 2016 (incorporated herein by reference to Exhibit 3.1 of Cabot's Corporation's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2015, file reference 1-5667, filed with the SEC on February 5, 2016).
4.3†	Cabot Corporation 2017 Long-Term Incentive Plan (incorporated herein by reference to Appendix A of Cabot Corporation's Proxy Statement on Schedule 14A relating to the 2017 Annual Meeting of Shareholders, File No. 1-5667, filed with the Commission on January 30, 2017).
5.1*	Opinion of Brian A. Berube, Senior Vice President and General Counsel.
23.1*	Consent of Deloitte & Touche LLP.
23.2*	Consent of Brian A. Berube, Senior Vice President and General Counsel (included in Exhibit 5.1).
24.1*	Power of Attorney (included on the signature page of this registration statement).

 ^{*} Filed herewith

Item 9. Undertakings.

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, *however*, that paragraphs (a)(1)(i) and (a)(1)(ii) above shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

[†] Management contract or compensatory plan or arrangement

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Boston, Massachusetts on this 15th day of March, 2017.

CABOT CORPORATION

By: /s/ Sean D. Keohane
Sean D. Keohane
President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

Each person whose signature appears below appoints Brian A. Berube and Jane A. Bell, and each of them, severally, as his or her true and lawful attorney or attorneys-in-fact and agent or agents, each of whom shall be authorized to act with or without the other, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead in his or her capacity as a director or officer or both, as the case may be, of Cabot Corporation, to sign any and all amendments (including post-effective amendments) to this registration statement and all documents or instruments necessary or appropriate to enable Cabot Corporation to comply with the Securities Act of 1933, as amended, and to file the same with the Securities and Exchange Commission, with full power and authority to each of said attorneys-in-fact and agents to do and perform in the name and on behalf of each such director or officer, or both, as the case may be, each and every act whatsoever that is necessary, appropriate or advisable in connection with any or all of the above-described matters and to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Sean D. Keohane Sean D. Keohane	President, Chief Executive Officer and Director (Principal executive officer)	March 15, 2017
/s/ Eduardo E. Cordeiro Eduardo E. Cordeiro	Executive Vice President and Chief Financial Officer (Principal financial officer)	March 15, 2017
/s/ James P. Kelly James P. Kelly	Vice President and Controller (Principal accounting officer)	March 15, 2017
/s/ John F. O'Brien John F. O'Brien	Director, Non-Executive Chairman of the Board	March 15, 2017
/s/ Juan Enriquez Juan Enriquez	Director	March 15, 2017
/s/ William C. Kirby William C. Kirby	Director	March 15, 2017
/s/ Roderick C.G. Macleod Roderick C.G. MacLeod	Director	March 15, 2017

/s/ John K. McGillicuddy John K. McGillicuddy	Director	March 15, 2017
/s/ Patrick M. Prevost Patrick M. Prevost	Director	March 15, 2017
/s/ Sue H. Rataj Sue H. Rataj	Director	March 15, 2017
/s/ Matthias L. Wolfgruber Matthias L. Wolfgruber	Director	March 15, 2017
/s/ Mark S. Wrighton Mark S. Wrighton	Director	March 15, 2017

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^{*} Filed herewith

[†] Management contract or compensatory plan or arrangement

March 15, 2017

Cabot Corporation Two Seaport Lane Suite 1300 Boston, MA 02210

Re: Cabot Corporation 2017 Long-Term Incentive Plan

Ladies and Gentlemen:

I am Senior Vice President and General Counsel of Cabot Corporation, a Delaware corporation (the "Company"), and have represented the Company in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933 (the "Act") of a Registration Statement on Form S-8 (the "Registration Statement") relating to up to 5,375,000 shares (the "Shares") of the Company's common stock, par value \$1.00 per share, issuable pursuant to the Cabot Corporation 2017 Long-Term Incentive Plan (the "Plan").

I have examined the Company's Restated Certificate of Incorporation and By-Laws, as amended to date, and originals, or copies certified or otherwise identified to my satisfaction, of corporate records of the Company, including minute books of the Company, certificates of public officials and of representatives of the Company, statutes and other instruments or documents, as a basis for the opinion hereinafter expressed. In making my examination, I have assumed that all signatures on all documents examined by me are genuine, that all documents submitted to me as originals are accurate and complete, that all documents submitted to me as copies are true and correct copies of the originals thereof and that all information submitted to me was accurate and complete.

Based on the foregoing, and subject to the assumptions, limitations and qualifications set forth herein, I am of the opinion that the Shares have been duly and validly authorized for issuance by all necessary corporate action on the part of the Company and, upon delivery thereof in accordance with the terms and provisions of the Plan, such Shares will be validly issued, fully paid, and non-assessable.

This opinion is limited to the original issuance of Shares by the Company. It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

I am a member of the Massachusetts Bar and the opinion set forth above is limited in all respects to the laws of The Commonwealth of Massachusetts and the General Corporation Law of the State of Delaware.

I hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act. In giving such consent, I do not thereby admit that I am in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Brian A. Berube

Brian A. Berube

Senior Vice President and General Counsel

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our reports relating to the consolidated financial statements of Cabot Corporation and the effectiveness of Cabot Corporation's internal control over financial reporting each dated November 23, 2016, appearing in the Annual Report on Form 10-K of Cabot Corporation for the year ended September 30, 2016.

/s/ Deloitte & Touche LLP

Boston, Massachusetts

March 15, 2017