CROMPTON CORP Form SC 13G February 08, 2005

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934*

CROMPTON CORPORATION

(Name of Issuer)

Common Stock

(Title of Class of Securities)

227116100

(CUSIP Number)

December 31, 2004

(Date of Event Which Requires Filing of 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. 227116	100
	EPORTING PERSONS. FICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).
752403190	APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)
(b) " 3 SEC USE ONL	Y
4 CITIZENSHIP	OR PLACE OF ORGANIZATION
a Nevada Co	orporation 5 SOLE VOTING POWER
SHARES BENEFICIALLY	6 SHARED VOTING POWER
OWNED BY EACH	7 SOLE DISPOSITIVE POWER
REPORTING PERSON WITH	8 SHARED DISPOSITIVE POWER
WIII	AMOUNT DENIETICIALLY OWNED BY EACH DEDODTING DED CON

- $9\;$ AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

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

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IA

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Item 1 (a) Name of Issuer Crompton Corporation

(b) Address of Issuer s Principal Executive Offices

199 Benson Road

Middlebury, CT 06749

- Item 2 (a) Name of Person Filing Barrow, Hanley, Mewhinney & Strauss, Inc.
 - (b) Address of Principal Business Office or, if none, Residence

One McKinney Plaza

3232 McKinney Avenue

15th Floor

Dallas, TX 75204-2429

- (c) Citizenship
 - a Nevada Corporation
- (d) Title of Class of Securities

Common Stock

(e) CUSIP Number 227116100

- Item 3. If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:
 - (a) "Broker or dealer registered under section 15 of the Act (15 U.S.C. 780).
 - (b) "Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
 - (c) "Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
 - (d) "Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8)
 - (e) x An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
 - (f) "An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
 - (g) A parent holding company or control person in accordance with §240.13d-1(b)(ii)(G);
 - (h) " A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
 - (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
 - (j) "Group, in accordance with §240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned:
- (b) Percent of class:
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote
 - (ii) Shared power to vote or to direct the vote
 - (iii) Sole power to dispose or to direct the disposition of
 - (iv) Shared power to dispose or to direct the disposition of:

Instruction. For computations regarding securities which represent a right to acquire an underlying security see \$240.13d-3(d)(1).

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

Yes

Instruction: Dissolution of a group requires a response to this item.

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

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item, and if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of the employee benefit plan, pension fund or endowment fund is not required.

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

If a parent holding company has filed this schedule, pursuant to Rule 13d-1(b)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identification of the relevant subsidiary.

Item 8. Identification and Classification of Members of the Group.

If a group has filed this schedule pursuant to \$240.13d-1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to \$240.13d-1(c) or \$240.13d-1(d), attach an exhibit stating the identity of each member of the group.

Item 9. Notice of Dissolution of a Group

Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

Item 10. Certification

By signing below the undersigned certifies that, to the best of its 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 purpose or effect.

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.

Barrow, Hanley, Mewhinney & Strauss, Inc.

By: /s/ James P. Barrow Name: James P. Barrow

Title: President

February 8, 2005