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A STUDY OF NEEDED ALTERATIONS
" IN READY-MADE DRESSES

by

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to the
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Approved by:

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CHAPTER I

INTRODUCTION

Women generally are faced with the problem of having their clothes fit properly. Whether their dresses are made at home or bought ready-made, they must fit correctly to look fashionable and to be comfortable and serviceable to the wearer. Dresses made by mass production cannot assure a dress in every size to fit every individual, but the dresses should be cut and constructed so as to eliminate the necessity for many alterations and to allow for the alterations that are necessary. A dress which fits the figure is more likely to sell than one which needs many adjustments, costly in both time and money.

In the purchasing of dresses over a period of time the cost of alterations may be such a considerable amount that it will result in a decrease in the number of dresses that may be bought. The consumer usually pays for the cost of altering a dress, although some stores do not make a charge for alterations. Alterations sometimes are made free of charge in order to make a sale or on all dresses above a certain price level. Where this is true surely the consumer pays for this service in the original cost of the dress, as the store must make a profit on each garment sold. If alteration cost could be reduced to a minimum by the elimination of many fitting problems, the buying power of the American women would increase.

Some dresses will fit some individuals perfectly, while others marked the same size will require many alterations. The fact that there is no generally accepted standardization for the sizing of garments may account for this. Each manufacturer marks his dresses according to his own set of measurements, and thus many variations are found in the measurements of dresses of the same marked size.

Dresses can be fitted properly through alterations. A dress can usually be taken up to fit, but the seam allowances will determine whether the dress may be let out. It is generally assumed that the higher-priced dresses have more adequate seam allowances, which allow these dresses to be let out if necessary. In cheaper dresses the manufacturer must sometimes skimp on the material to make the dress sell at a certain price. Skimping on the seams, a common method of saving material, makes it impossible to fit the dress by letting the seams out.

Statement of the Problem

The present study of needed alterations in ready-made dresses was undertaken to determine (1) the alterations most needed, (2) the cost of the alterations to the consumer, and (3) the alteration possibilities of the dresses which required altering.

Delimitation of the Problem

The original plan of this investigation provided for a comparison of dress measurements and marked sizes and a comparison of marked sizes of various manufacturers. Because of the wide variability in the marked sizes and the measurements obtained, this phase of the problem yielded little information to the topic under discussion. The

number of manufacturers concerned was found to be too large to afford information to furnish data representative of any manufacturer or group of manufacturers. Consequently these two phases were excluded from consideration.

The investigation was limited to three types of stores: a specialty shop, a department store, and a chain-department store, all in Greensboro, North Carolina, a town of about seventy thousand population.

Review of the Literature

To avoid duplicating previous work and to locate references pertinent to the study the following sources were consulted:

Reader's Guide to Periodical Literature: An Author and Subject Index 1900 May, 1945. New York: H. W. Wilson Company, 1900-1945.

19th Century Reader's Guide to Periodical Literature 1890-1899, Vols I and II. New York: H. W. Wilson Company, 1944.

The Agricultural Index: Subject Index to a Selected List of Agricultural Periodicals, Books and Bulletins, New York: H. W. Wilson Company, 1916-April 1945.

The Industrial Arts: Subject Index to a Selected List of Engineering, Trade and Business Periodicals. New York: H. W. Wilson Company, January, 1924-March, 1945.

Notes on Graduate Studies in Home Economics, Washington: United States Bureau of Home Economics, Office of Education, 1936-1942.

Abstracts of Studies in Home Economics 1931-1938. Washington: United States Department of the Interior, Office of Education, Vocational Division, September, 1938.

Education Index: A Cumulative Author and Subject Index to a Selected List of Educational Periodicals, Books and Pamphlets, New York: H. W. Wilson Company, 1929-May, 1945.

The Bibliographical Index: A Cumulative Bibliography of Bibliographies, 1937-1942. New York: H. W. Wilson Company, 1945.

Consumers Bookshelf: Bibliography of Publications on Comodity Buying and other Consumer Problems. Consumer's Council Series Pub. No.4, Washington: United States Department of Labor, December, 1937.

A Bibliography for Retailers. National Dry Goods Association Compiler, New York: The Association, July, 1941.

Titles of Unpublished Theses in the Field of Home Economics, 1924-1931, Washington: United States Department of Agriculture, Bureau of Home Economics, May, 1932.

The Woman's Collection, Minnie Middleton Hussey and Roseanne Hudson, Compilers. Ann Arbor, Michigan: Edwards Brothers Incorporated, 1944.

Index to Publications of the United States Department of Agriculture 1901 to 1940. Washington: United States Printing Office, 1943.

List of Available Publications of the United States Department of Agriculture, Revised edition. Miscellaneous Publication No. 60, Washington: United States Department of Agriculture, January, 1945.

Literature Related to this Thesis

The following paragraphs summarize the literature which was related in certain aspects to the problem of this investigation. Much has been said about the need for standardizing sizes used by the manufacturer in sizing dresses for better fit, but little actually has been done to eliminate fitting problems. Few studies have been made in regard to the alterations that are most needed in fitting ready-made dresses.

Brindze relates that the more reliable manufacturers of women's garments use the Bauman Forms to determine size. "Despite the great difference in the measurements of size 18 and 36, it is a common practice for retailers to substitute one for the other. Obviously this results in improper fitting."¹

The Bauman Measurements as referred to by Brindze are:

	Size 18 (Misses)	Size 36(Women)
Bust	37 inches	39 inches
Waist	30 1/2 inches	31 1/2 inches
Hips	40 1/2 inches	42 inches
Shoulder(measured across back)	14 3/8 inches	15 inches
Waist Length (front)	14 7/8 inches	15 1/2 inches
Waist Length (back)	15 7/8 inches	16 1/2 inches

In 1938 Dana² related that most women realize from experience that the size attached to the dress does not mean that it will always fit, although the marked size of the dress is the one usually worn. They must try the dress on to make sure it fits.

Thor and Cowles³ in 1933 in making a study of How Women Select Dresses found that 90.5 per cent of the customers who tried on dresses knew which size of dress usually fitted them, while the rest over estimated or underestimated the size they wore. This was accounted for by the customer's lack of knowledge and also the absence of standardization of garment sizes.

¹Ruth Brindze, "What Well-Dressed Women Will Wear," How to Spend Money (Garden City, New York: Garden City Publishing Company, 1938), pp. 41-42.

²Margaret Dana, "Madame Had a Pretty Dress," Atlantic Monthly, CLII (August, 1938), 236.

³Esther K. Thor and May L. Cowle, "How Women Select Dresses," Journal of Home Economics, XXV (August, 1933), 575-576.

Although every manufacturer of dresses has different measurements upon which he develops his sizes Dana says that most dresses fall into these familiar size ranges: Junior Misses', sizes 11 to 19; Misses', size 12 to 20; Women's, sizes 36 to 44; Half Sizes, sizes $16\frac{1}{2}$ to $26\frac{1}{2}$; and Large Women's, sizes 38 to 44.

The junior sizes are supposedly for the immature figure with small bust and proportionately large hips; the misses' sizes for the average or normal figure with hips four inches larger than the bust (although why this is called "normal" these days is a mystery); women's sizes are presumably for the tall woman with full figure; while half sizes are designed, in theory, for short mature women with large hips, short waist, and short arms. Larger women's sizes are intended to fit women of what is known as "generous proportions".⁴

Anderson gives us another interpretation of sizes. Extra sizes are also made for the larger, well proportioned woman and come in sizes 48 to 56.

All regular sizes are proportioned for the figure three inches larger through the hips than the bust and five feet seven inches in height. Half-sizes in ready-mades come for three types of figures: The "regular half-sizes" come for the shorter figure, somewhat fuller through the hips in proportion to the bust and come in sizes $18\frac{1}{2}$ to $24\frac{1}{2}$; "Half-size stouts" come for the average height figure but vary large through the hips in proportion to the bust. Sizes range from $18\frac{1}{2}$ to $24\frac{1}{2}$. "Half-size extra long" comes for the regular figure but is longer waisted and larger throughout and comes in sizes $38\frac{1}{2}$ to $44\frac{1}{2}$.⁵

The average American woman is from five feet one or two inches to five feet four or five inches in height. The manufacturers claim that they make clothes for the average woman, but they have not been able to determine the height or shape of the "average woman". They have designed clothes in the past twenty years for the tall slender woman rather than the

⁴Margaret Dana, "Sizes" Behind the Label, (Boston: Little, Brown and company, 1941), pp. 120-121.

⁵L. V. Anderson, "Dress Sizes," Consumers Digest, VII(April, 1940), 36.

woman of average height, according to Raushenbush.⁶

In 1942, Woman's Wear Daily told of a new size range, between Junior and Misses' proportions, which was being developed by the Varden Dress Company to eliminate most frequent alterations for problem customers. After six months of research with three hundred women in the five-foot-one to five-foot-five height range, into which 70 per cent of the women were said to fall, they introduced a new misses' size range with the registered name of the "Little Shepherdess".

The "Shepherdess" range is a "plus sizing. Bonwit Teller is merchandising it as "9 plus to 17 plus" but it is understood that all other stores who will handle the line will feature it as a misses' "10 plus" range and in the regular misses' dress department.

The table of proportions is distinctly different from existing ranges, falling midway between the junior and the miss. It has a misses' shoulder but is fuller through the bust than a junior, and in waist length is shorter than a misses', but not so short as a junior. Through the waist and diaphragm, and over the hip and stomach it is easier than either miss or junior. These measurements are planned to eliminate most frequent alterations across the bust, waistline and hips. They also, in most cases, make unnecessary the raising of the skirt which is frequently required to fit the short, somewhat "hippy" figure.

The Varden Dress Company estimates that the average cost of alteration to the woman of five feet one inch to five feet five inches runs anywhere from \$4.50 to \$8.00 a garment and that all costs are reduced by the new sizing with the exception of the hem although this too will be perfect if the woman is five feet two and a half inches to five feet four inches. The above dress group is in the \$14.75 to \$22.75 wholesale range.⁷

After the ready-made garments have been sold, the problem of alterations arises if the dress does not fit the customer. In a survey conducted by the Merchandising Division of the National Retail

⁶Winifred Raushenbush. "Slack Costumes for the Average Figure," How to Dress in Wartime (New York: Coward-McCan, 1942). pp. 61-62.
⁷Woman's Wear Daily. "Plus Sizing," LXVII (February 25, 1942). 20.

Dry Goods Association⁸ in 1938 some of the common causes of alterations in fitting women's dresses were listed as: waistline adjustments by 82 per cent of the reporting stores and hemline adjustments by 63 per cent of the stores. 78 per cent reported hemline adjustments and 52 per cent reported waistline adjustments in misses' dresses. In misses' and women's dresses fitting the shoulders, hips and sleeves were mentioned. Other alterations mentioned in women's dresses were: adjusting back of neck, changing an unbecoming line, straightening skirt, inserting slide fastener plackets, adjusting dresses cut the wrong way of the material, adjusting poorly cut armholes, and fitting the customer with the wrong size. In misses' dresses they tightened the side seams for a snug fit and took in the wrist of long sleeves. The percentage of alterations was higher in women's sizes than in misses', although 14 per cent of the stores reported that alterations for women's dresses were as few as those for misses' dresses.

Woman's Wear Daily's⁹ fashion merchandising staff representatives, in interviewing retail representatives in some of the larger cities about their attitude on alterations, found that in Philadelphia the ready-to-wear buyer felt that much could be done in the way of resizing patterns to eliminate alterations. Some manufacturers have more desirable patterns that fit most people, and it was felt all the manufacturers should accept patterns which fit more women. In Boston it was thought that fitting problems were due to the current silhouette of the narrow skirt. Uneven hemlines was the greatest complaint, and one buyer

⁸National Retail Dry Goods Association, Dress Alterations, Causes and Cost, New York: The Association, October, 1938, pp. 1-3.
⁹The Fit of Fashion; Woman's Wear Daily, LXX (January 24, 1945), 3.

stated " there could be no logical reason for an uneven hemline unless it be poor quality fabric, and this is where I put the blame". In St. Louis the leading dress buyer revealed that dresses of all prices were fitting better and the percentage of alterations had decreased. They reported the "manufacturers had improved the fit of garments from 75 to 100 per cent within the last one or two years. In former years the average woman buying in the budget shop practically counted on an alteration of some kind as having to be made". Now, however, few alterations are needed. Their only complaint was "about hemlines". Even dresses in the higher brackets were coming from the manufacturer with the hems dipping or generally uneven.

The cost of the alteration sometimes prevents the sale of a dress. Thor and Cowles¹⁰ found that 25 per cent of those who tried on dresses failed to buy because they needed alterations. Other reasons for not purchasing the dress were the cost of the alterations, distrust of the fitter, and fear that the dress would not look well after altering.

According to Women's Measurements for Garment and Pattern Construction,¹¹ an additional 25 per cent on the cost of the dress might have to be added for the cost of the alteration. In a National Retail Dry Goods Association¹² survey the average charge for alterations was found to be between \$2.00 and \$2.99 per dress in 50 per cent of the stores. 23 per cent of the stores reported an average charge of \$2.00 to

¹⁰ Esther K. Thor and May L. Cowles, op. cit., p. 576.

¹¹ Women's Measurements for Garments and Pattern Construction, Miscellaneous Publication No. 454, (Washington: United States Department of Agriculture, 1940), p. 1.

¹² National Retail Dry Goods Association, op. cit., p. 3-4.

\$2.49 per dress, and 27 per cent reported an average charge of \$2.50 to \$2.99. 23 per cent of the stores reported charges of \$3.00 or higher. The highest charge reported was \$7.50, reported by a high-class specialty shop in New York, and the lowest was \$1.00. Where figures were available the alteration charge tended to be higher for dresses retailing above \$25.00. With a few exceptions, the stores reported that the charge to the customer covered the major portion of the expense of the alterations.

If a dress has to be let out in order to be fitted, the seam allowance should be sufficient to take care of the alteration. Bowers¹³ found that dresses that were priced at more than \$30.00 retail were satisfactory in this respect; below the \$15.00 price level the seam widths were often too narrow for durability and to permit alterations.

Brindze¹⁴ states the manufacturer may have skimmed on the material if a dress of the size normally worn was too tight when tried on. Sizes are not uniform in dresses and do not run true to marking, according to Hamblem and Zimmerman.¹⁵

Andres and Cocanower¹⁶ states that there are no laws requiring standardizing of garment sizes, but that the American Standards Association is developing standard sizes for children's garments based upon the findings of the survey of children's sizes, directed by Ruth O'Brien of the Bureau of Home Economics, United States Department of Agriculture in 1939.

¹³Mabel G. Bowers, A Study of the Relationship between Price and Quality of Construction in Ready-Made Dresses, Masters' thesis, University of Texas, 1940, p. 87.

¹⁴Ruth Brindze, Stretching Your Dollar in Wartime. (New York: Vanguard Press, 1942), p. 95.

¹⁵Stewart B. Hamblem, and G. Frank Zimmerman. Wise Spending, (New York: Harper and Brothers, 1941), p. 125.

¹⁶E. M. Andres and C. D. Cocanower, Economics and the Consumer, (New York: Houghton-Mifflin Company, 1942), p. 349.

In 1939 the Bureau of Home Economics conducted a research survey in which they measured 15,000 women to determine the measurements of the average American woman which could be used for improving the fit of women's garments and patterns.¹⁷ The average height of the women they measured was found to be 63.13 inches.¹⁸

The Women's Measurements for Garments and Pattern Construction says:

The chief problem in setting up a satisfactory set of body measurements for garment and pattern sizing is one of selecting the combination of measurements that is most closely related to the other dimensions of a woman's body... No single measurement is adequate as a basis for sizing because no measurement is closely related both to the heights and to the girths. In particular, bust girth, which is the usual determinant of dress sizes at present, shows only a feeble relation to the various height measurements. That is, women with bust measure 32 inches are almost exactly as tall on the average as those with bust 44.

Two measurements are needed, one as an index of the vertical measurements and the other as an index of the horizontal measurements. Women vary much more in their girths than in their heights, and in addition, for many types of garments, the fit in the circumference measurements is far more important than in the length measurements. For this reason only a few vertical sizes will be required. Perhaps "regular", "longs" and "shorts" are all that are necessary. Such decisions, however, must be made with primary regard to consumer preferences and commercial feasibility rather than on the basis of the data collected in the survey.¹⁹

Method

The data were obtained by a check list revised and approved by a Jury of three competent professors of clothing in the Department of Home Economics of the Woman's College of the University of North Carolina and a buyer in a department store with a large volume of business in ready-made dresses. This check list provided information about the alterations necessary, the cost of alterations to the consumer, and the alterations

¹⁷Women's Measurements for Garment and Pattern Construction, p. 1.

¹⁸Ibid., p. 29.

¹⁹Ibid., p. 42.

possibilities of the dresses which require altering.

CHAPTER II

PROCEDURE

A check list was set up by which the measurements of the dress, the alteration possibilities of the dress, the alterations needed on the dress, the size and price of the dress, and the cost of the alteration could be recorded.

One hundred dresses were examined at each store by rotating visits to the stores. All the dresses which needed alterations were not checked, as some were altered before they could be studied. The dresses were checked after they were brought to the alteration room and before any alterations were made. In most cases the dresses which needed altering were checked, because the stores had so much work that they kept the dresses in the alteration room several days before the alterations were made.

All measurements were taken with a Warren Tape Measure, which was checked for accuracy by a Stanley Meter Stick No. 141 at the beginning of the study and by another new tape measure of the same kind. The tape was checked with the meter stick after measuring each fifty dresses to see that it had not stretched. The same tape measure was used throughout the study.

All the dresses which were available when the examiner was working were studied. All sizes and price levels of dresses were used in the study. If any alterations had been made the dresses were not examined. All the measurements were made with the dress on a flat surface. If pins hindered in getting a true measurement they were removed and then

replaced. The measurements were taken in the order in which they appeared on the check list and were recorded as they were made. In the recording of alteration possibilities of the dress the seam measurements were made at the narrowest place on the seam, or where there would be the greatest need for an alteration. After the measuring was completed the alterations that were to be made on the dress were checked with the fitter and recorded.

CHECK LIST

Store _____ Name of Manufacturer _____ Size _____

Price _____ Cost of Alteration _____ Percentage of Price _____

Dress Measurements:Alteration Possibilities:

L. Shoulder Seam	W. Shoulder Seam
L. Underarm Blouse Seam	W. Armscye Seam
L. Side Hip Seam	W. Blouse Underarm Seam
L. Blouse F.	W. Side Hip Seam
L. Skirt F.	W. Waistline Seam
L. Blouse B.	W. Placket Seam
L. Skirt B.	W. Hem
W. Shoulder F.	W. Sleeve Seams
W. Shoulder B.	No. other Blouse Seams F.
L. Sleeve, Inside Seam	No. other Skirt Seams F.
L. Sleeve, Outside Length	No. other Blouse Seams B.
L. Sleeve, Shoulder to Elbow	No. other Skirt Seams B.
L. Sleeve, Elbow to Wrist	No. Shoulder Darts Front Back
W. Sleeve, Girth	No. Neckline Darts Front Back
W. Sleeve, Elbow	No. Waist Darts Front Back
W. Sleeve, Wrist	No. Skirt Darts Front Back
	Underarm Darts

Alterations Necessary:

Hem Level	Yes	
Hem	Shorten	Lengthen
Waist Blouse F.	Shorten	Lengthen
Waist Blouse B.	Shorten	Lengthen
Waistline Darts	Take Up	Let Out
Waistline Seams	Take Up	Let Out
Skirt F.	Take Up	Let Out
Skirt B.	Take Up	Let Out
Hip Seam R.	Take Up	Let Out
Hip Seam L.	Take Up	Let Out
Underarm Blouse Seam R.	Take Up	Let Out
Underarm Blouse Seam L.	Take Up	Let Out
Shoulder Seam	Take Up	Let Out
Shoulder Lines	Narrow	Extend
Sleeve Seam	Take Up	Let Out
Sleeve	Shorten	Lengthen
Sleeve, Adjust Elbow Fullness	Shorten	Lengthen
Underarm Darts	Take Up	Let Out
Underarm Darts, Change Position	Raise	Lower
Shoulder F. Darts	Take Up	Let Out
Shoulder B. Darts	Take Up	Let Out
Neckline F. Darts	Take Up	Let Out
Neckline B. Darts	Take Up	Let Out

Store- The name of the store was recorded only as a method of determining the number of dresses studied at each store.

Manufacturer- The manufacturer's name or number was recorded as it was found on the sales ticket.

Size- The sizes were listed as those which appear on the price tag attached to the dress. At two of the stores the size appeared on the tag so that it could be seen by the customer. At the other store it was written in code, but this was interpreted and placed on the sheet - as size fourteen or thirty-two, for examples.

Price- The price was recorded as it appeared on the tag. If the price was marked down the original price was used.

Cost of Alteration- This information was recorded as the charge made on the sales ticket. If there was no charge made for the alteration it was marked as no cost.

Percentage of Price- The percentage cost of the alteration to the price of the dress was worked out and entered in this space. For example, if the price of the dress was \$25.00 and the cost of the alteration was \$2.50, the percentage of price was 10 per cent.

Dress Measurements-

1. L. Shoulder Seam- The length of the shoulder seam was taken along the shoulder seam from the armseye seam to the edge of the neckline or the collar seam. The measurement on dresses which had no sleeves or armseye seam was taken from the edge of the shoulder pad to the neckline or collar seam.

2. L. Underarm Blouse Seam- The length of the underarm blouse seam was taken along the seam line from the armseye to the waistline seam. In a sleeveless dress the length was measured from the armseye to

the waistline seam. When there was no armscye seam and the dress contained sleeves, such as a dolman sleeve, the measurement was taken from the point where the seam was clipped at the underarm, or from the point where the sleeve began to curve from the straight line of the sleeve seam. If there was no waistline seam the length was measured from the armscye seam to the normal waistline.

3. L. Side Hip Seam- The length of the side hip seam was taken along the hip seam from the waistline seam to the lower edge of the skirt. When there was no waistline seam the measurement was taken from the normal waistline to the lower edge of the skirt.

4. L. Blouse F.- The length of the blouse front was taken from the center of the shoulder seam to the waistline seam midway between the side seam and the center front. When there was no waistline seam the measurement was made to the normal waistline.

5. L. Skirt F.- The length of the skirt front was taken from the waistline seam to the lower edge of the skirt at the center front. When there was no waistline seam the normal waistline was used.

6. L. Blouse B.- The length of the blouse back was taken from the edge of the neckline or collar seam at the center back to the waistline seam or normal waistline.

7. L. Skirt B.- The length of the skirt back was taken from the waistline seam or normal waistline at the center back to the lower edge of the skirt.

8. W. Shoulder F.- The width of the shoulder front was taken from armscye to armscye seam four inches below the outer end of the shoulder seam where it joined the armscye. When there was no shoulder seam it was taken four inches below the normal shoulder line.

9. W. Shoulder B.- The width of the shoulder back was taken from armscye to armscye seam three inches below the outer end of the shoulder seam where it joined the armscye. When there was no shoulder seam it was taken three inches below the normal shoulder line.

10. L. Sleeve, Inside Seam.- The length of the inside sleeve seam was taken along the seam line from the armscye seam to the lower edge of the sleeve.

11. L. Sleeve, Outside Length.- The length of the outside of sleeve was taken along the outside of the sleeve from the shoulder seam to the lower edge of the sleeve. When there was no armscye seam the measurement was made from the edge of the shoulder pad to the lower edge of the sleeve. When there was no shoulder seam the normal shoulder line was used.

12. L. Sleeve, Shoulder to Elbow.- The length of the sleeve shoulder to elbow, was taken along the sleeve seam from the armscye to the center of the elbow fullness or darts.

13. L. Sleeve, Elbow to Wrist.- The length of the sleeve, elbow to wrist, was made along the sleeve seam from the center of the elbow fullness or darts to the lower edge of the sleeve.

14. W. Sleeve Girth.- The width of the sleeve was taken from the sleeve seam where it met the armscye, to the outside fold of the sleeve and the measurement was doubled to give the girth.

15. W. Sleeve, Elbow.- The width of the sleeve at the elbow was taken from the center of the elbow fullness or darts to the outside fold of the sleeve, and the measurement was doubled to give the width.

16. W. Sleeve, Wrist.- The width of the sleeve at the wrist was taken at the lower edge of the sleeve from the sleeve seam to the outside fold of the sleeve, and the measurement was doubled to give the

width.

Alteration Possibilities.-

1. W. Shoulder Seam.- The width of the shoulder seam was measured at the narrowest place on the seam.
2. W. Armscye Seam.- The width of the armscye seam was measured at the narrowest place on the seam.
3. W. Blouse Underarm Seam.- The width of the underarm blouse seam was measured at the narrowest place on the seam.
4. W. Side Hip Seam.- The width of the side hip seam was measured seven inches below the waistline seam or the normal waistline.
5. W. Waistline Seam.- The width of the waistline seam was measured at the narrowest place on the seam.
6. W. Placket Seams.- The width of the placket seams was measured at the narrowest place on the front or back seams.
7. W. Hem.- The width of the hem was measured at the narrowest place on the hem.
8. W. Sleeve Seam.- The width of the sleeve seam was measured at the narrowest place on the seam.
9. No. Other Blouse Seams F.- The number of front blouse seams, other than the side seams, was recorded if they could be let out or taken up in fitting the dress. Only vertical seams were checked. When the blouse had a front opening, this opening was counted as one seam.
10. No. Other Skirt Seams F.- The number of vertical skirt seams, other than the side seams, was counted if they could be let out or taken up in fitting the dress. When the skirt had a front opening, this opening was counted as one seam.

11. No. Other Blouse Seams B.- The number of back blouse seams, other than the side seams, was recorded if they could be let out or taken up in fitting the dress. Only vertical seams were checked. When the blouse had a back opening, this opening was counted as one seam.

12. No. Other Skirt Seams B.- The number of vertical seams, other than the side seams, was counted if they could be let out or taken up in fitting the dress.

13. No. Shoulder Darts, Front-Back.- The number of shoulder darts was recorded. When there was fullness instead of a dart this was recorded as fullness.

14. No. Neckline Darts, Front-Back.- The number of neckline darts was recorded.

15. No. Waist Darts, Front-Back.- The number of waist darts was recorded. When there was fullness instead of a dart this was recorded as fullness.

16. No. Skirt Darts, Front-Back.- The number of skirt darts was recorded. A pleat was counted as a dart if it could be used in fitting the dress.

17. Underarm Dart.- The number of darts running into the blouse side seam was recorded.

Alterations Necessary-

1. Hem Level.- Yes was checked when the dress length was correct at some points on the hemline but needed to be leveled.

2. Hem-Shorten.- Shorten was checked if the entire hemline was raised. Lengthen was checked when the entire hemline was let down.

3. Waist, Blouse F. Shorten was checked when the waistline seam was taken up in the blouse. Lengthen was checked when the waistline seam was let out in the blouse.

4. Waist, Blouse B.- Shorten was checked when the waistline seam was taken up in the blouse. Lengthen was checked when the waistline seam was let out in the blouse.

5. Waistline, Darts.- Take Up was checked when the vertical darts in the skirt or blouse were taken up to fit the waistline. Let Out was checked when the vertical darts in the skirt or blouse were let out to fit the waistline.

6. Waistline, Seams.- Take Up was checked when the seams of skirt or blouse were taken up to fit the waistline. Let Out was checked when the seams of the skirt or blouse were let out to fit the waistline.

7. Skirt, F.- Take Up was checked when the skirt front was raised at the waistline seam. Let out was checked when the skirt front was lowered at the waistline seam.

8. Skirt, B.- Take Up was checked when the skirt back was raised at the waistline seam. Let Out was checked when the skirt back was lowered at the waistline seam.

9. Hip Seam R.- Take Up was checked when the right hip seam was taken up. Let Out was checked when the right hip seam was let out.

10. Hip Seam L.- Take Up was checked when the left hip seam was taken up. Let Out was checked when the left hip seam was let out.

11. Underarm Blouse Seam R.- Take Up was checked when the right underarm seam was taken up, Let Out was checked when the right underarm seam was let out.

12. Underarm Blouse Seam L.- Take Up was checked when the left underarm blouse seam was taken up. Let Out was checked when the left underarm blouse seam was let out.

13. Shoulder Seam.- Take Up was checked when the shoulder seam was taken up. Let Out was checked when the shoulder seam was let out.

14. Shoulder Line.- Narrow was checked when the shoulder line was narrowed by setting in the sleeve line. Extend was checked when the shoulder line was lengthened at the armhole.

15. Sleeve Seam.- Take Up was checked when the sleeve seam was taken up. Let Out was checked when the sleeve seam was let out.

16. Sleeve.- Shorten was checked when the sleeve was shortened. Lengthen was checked when the sleeve was lengthened.

17. Sleeve, Adjust Elbow Fullness.- Shorten was checked when the elbow fullness or darts were moved toward the armhole. Lengthen was checked when the elbow fullness or darts were moved toward the wrist.

18. Underarm Dart.- Take Up was checked when the dart was taken up. Let out was checked when the dart was let out.

19. Underarm Dart, Change Position.- Raise was checked when the dart was raised above its original position. Lower was checked when the dart was lowered below its original position.

20. Shoulder F. Dart.- Take Up was checked when the shoulder front dart was taken up. Let Out was checked when the dart was let out.

21. Shoulder B. Dart.- Take Up was checked when the shoulder back dart was taken up. Let Out was checked when the dart was let out.

22. Neckline F. Dart.- Take Up was checked when the neckline front dart was taken up. Let Out was checked when the dart was let out.

23. Neckline B. Dart.- Take Up was checked when the neckline back dart was taken up, When the neckline back was taken up by adding darts this was checked also. Let Out was checked when the dart was let out.

CHAPTER III

ANALYSIS OF DATA

Alterations Most Commonly Needed in Fitting Ready-Made Dresses

The total of alterations necessary on the three hundred dresses is shown by Table I. The hemline had to be changed on two hundred sixty-two of the dresses. Sixty-five had the hemline leveled while one hundred eighty had the hemline shortened. Only seventeen needed the hemline lengthened.

Seventy-seven dresses had the waistline fitted. This was done by taking up the seams of fifty-seven dresses and letting out the seams of thirteen dresses. Darts were taken up to tighten the waistline on six dresses, and only one let out the darts to make the waistline larger.

In fitting the side seams of the dresses the right hip seam was taken up on forty-four dresses, while the left hip seam was taken up on forty-three dresses. The extra seam taken up on the right hip was due to either poor cutting of the dress or the right hip being smaller than the left. Twenty-two dresses had to be let out on both hip seams.

The underarm blouse seams did not have to be taken up or let out as often as the hip seams. The blouse seams were fitted on thirty-nine dresses by taking up twenty-six dresses and letting out thirteen dresses.

The waist blouse front seam was fitted on fifty-five dresses by shortening fifty-two and lengthening three. The waist blouse back seam was fitted more often than the front. Sixty-four dresses had the blouse back waist seam fitted, by shortening sixty-one and lengthening three dresses.

The shoulder seam was taken up on twenty-two dresses but was not let out on any of the dresses.

The shoulder line was narrowed on twenty-six and not extended on any of the dresses.

The skirt front of the dresses had to be raised on thirteen dresses. The skirt had to be raised on fifteen dresses.

The sleeve seam was taken up on eleven dresses, and five had the sleeve seam let out.

The sleeve was shortened on eleven dresses, and three had the sleeve lengthened.

The elbow fullness of the sleeve was adjusted by shortening on three of the dresses.

The underarm dart was taken up on one dress. On two dresses the underarm dart position was raised.

The neckline darts had to be taken up or darts added on seventeen dresses.

The summary of the alterations which were necessary on all the three hundred dresses studied, as seen in Table I, shows that the most common fitting problem was that of changing the hemline on two hundred sixty-two dresses. The other problems in order of their frequency were: fitting the waistline by seams or darts on seventy-seven dresses, fitting the right and left hip seams on sixty-six and sixty-five dresses respectively, fitting the blouse back waistline seams on sixty-four dresses and the blouse front waistline seams on fifty-five dresses, fitting the underarm blouse seams on thirty-nine dresses, narrowing the shoulder lines on twenty-six dresses, taking up the shoulder seams on twenty-two dresses, fitting the neckline on seventeen dresses, fitting the sleeve seams on sixteen dresses, raising the skirt back on fifteen

dresses, changing the sleeve length on fourteen dresses, raising the skirt front on thirteen dresses, adjusting the elbow fullness on three dresses, changing the position of the underarm dart on two dresses, and taking up the underarm dart on one dress.

TABLE I

Alterations Necessary on 300 Dresses

Alteration	"Take Up"		"Let Out"		Total
	Alterations		Alterations		
Hem Level	Yes	65			65
Hem	Shorten	180	Lengthen	17	197
Waist, Blouse F.	Shorten	52	Lengthen	3	55
Waist, Blouse B.	Shorten	61	Lengthen	3	64
Waistline, Darts	Take Up	6	Let Out	1	7
Waistline, Seams	Take Up	57	Let Out	13	70
Skirt, F.	Take Up	13	Let Out	0	13
Skirt, B.	Take Up	15	Let Out	0	15
Hip Seam R.	Take Up	44	Let Out	13	66
Hip Seam L.	Take Up	43	Let Out	22	65
Underarm Blouse Seam R.	Take Up	26	Let Out	22	39
Underarm Blouse Seam L.	Take Up	26	Let Out	13	39
Shoulder Seam	Take Up	22	Let Out	13	22
Shoulder Line	Narrow	26	Extend	0	26
Sleeve Seam	Take Up	11	Let Out	0	16
Sleeve	Shorten	11	Lengthen	5	14
Sleeve, Adjust Elbow Fullness	Shorten	3	Lengthen	3	3
Underarm, Darts	Take Up	1	Let Out	0	1
Underarm, Darts, Change Position	Raise	2	Lower	0	2
Shoulder F. Darts	Take Up	0	Let Out	0	0
Shoulder B. Darts	Take Up	0	Let Out	0	0
Neckline F. Darts	Take Up	0	Let Out	0	0
Neckline B. Darts	Take Up	17	Let Out	0	17
Total		681		115	796

Some dresses needed only one alteration, while others needed more. By counting each fitting problem listed on the check list under alterations necessary as one, each dress was checked to see how many alterations were done on the dress. The largest number of alterations necessary on a dress was nine.

Table II shows the number of alterations that were necessary on the dresses. The total number of alterations on all the three hundred dresses was seven hundred ninety-six. The largest total number of alterations was necessary on the fifty-three dresses which required three alterations. The average number of alterations needed was 2.65 alterations per dress.

TABLE II

Total Number of Alterations Necessary

Number of Alterations Per Dress	Number of Dresses	Total Alterations
1	99	99
2	75	150
3	53	159
4	29	116
5	20	100
6	9	54
7	6	42
8	5	40
9	4	36
Total	300	796

The price of the dresses studied were shown in Figure 1. The greatest number of dresses studied were priced from \$15.00 to \$19.99, and all but nine dresses cost less than \$49.99. A little over half of the dresses were priced below \$19.99. The complete price range was from \$5.95 to \$79.95.

In making a comparative study of the price range of the dresses that were altered sizes 14 and 16 were chosen, as the greatest number of dresses was in these sizes. There were sixty-one dresses of size 14 and fifty-nine dresses of size 16. Figure 2 shows that most of the dresses were priced below \$50.00 in both sizes. Fifty-eight dresses in size 14 and fifty-six dresses in size 16 were priced below \$50.00. More than half, or thirty-two dresses, of size 14 were priced below

\$20.00; and more than half, or thirty-four of the dresses, in size 16 were priced below \$25.00. Thirty-two dresses in size 14 and twenty-six dresses in size 16 were priced below \$20.00. Twenty-six dresses in size 14 and thirty-one dresses in size 16 were priced between \$20.00 and \$50.00.

FIGURE 1
PRICE OF DRESSES

NO. DRESSES

70-

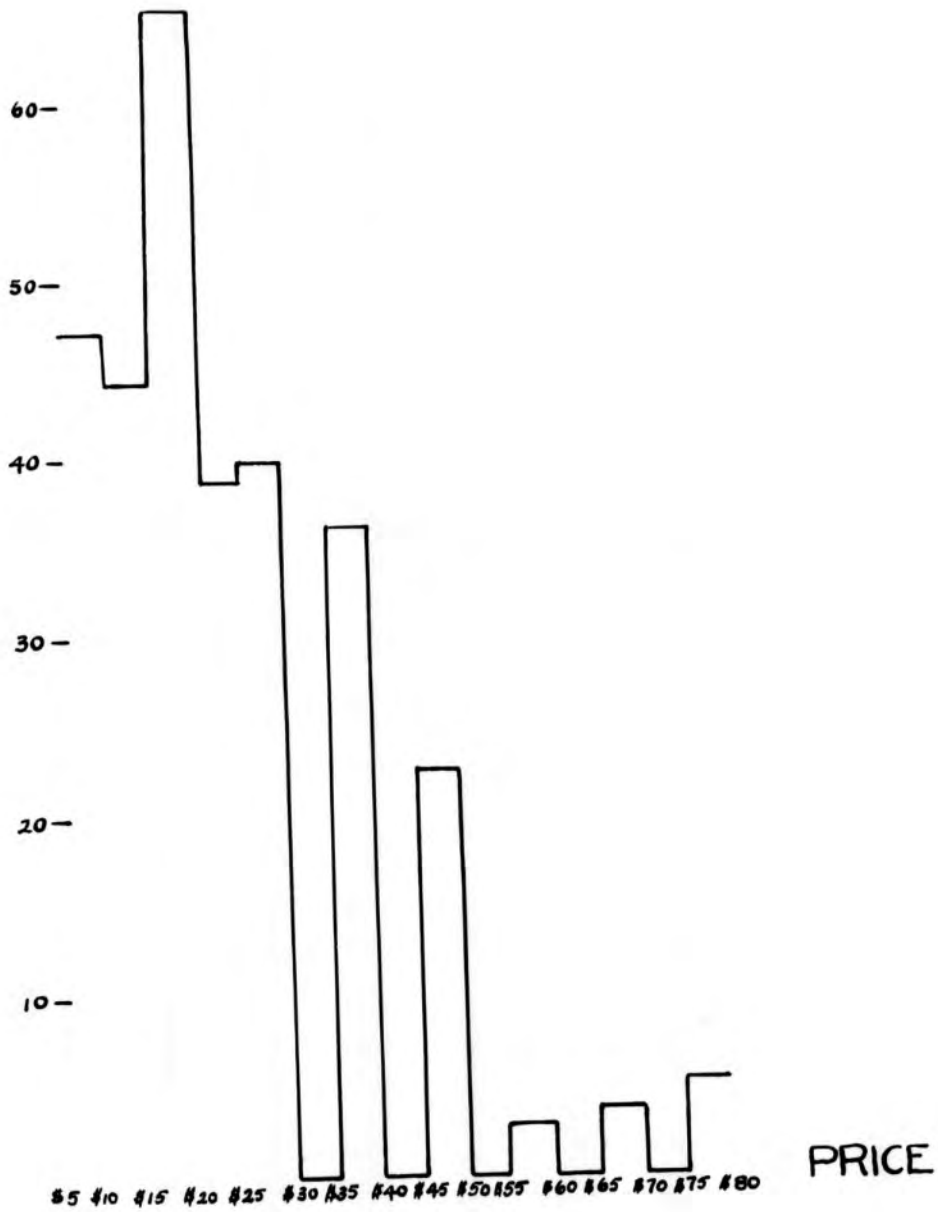
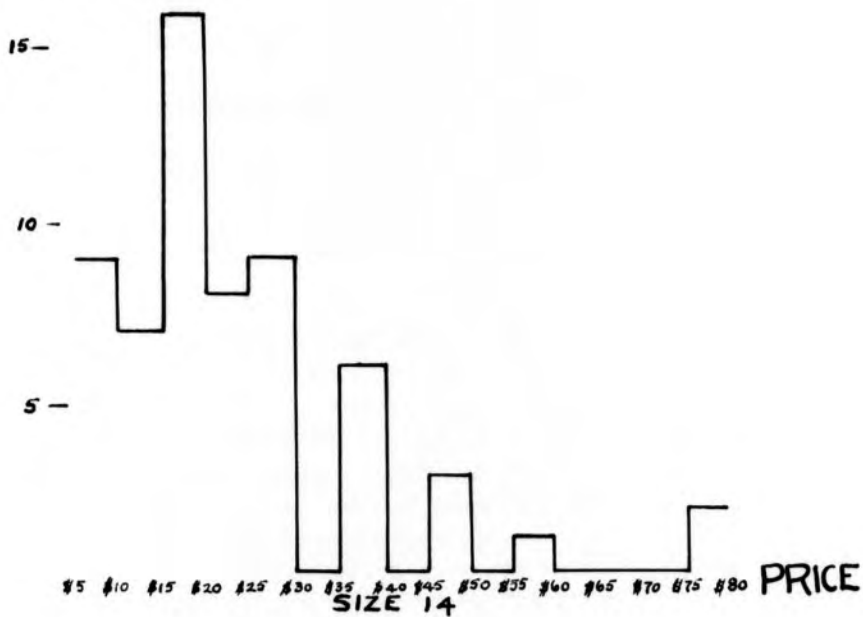


FIGURE 2
 PRICE OF DRESSES - SIZE 14 AND 16
 NO. DRESSES



NO. ALTERED

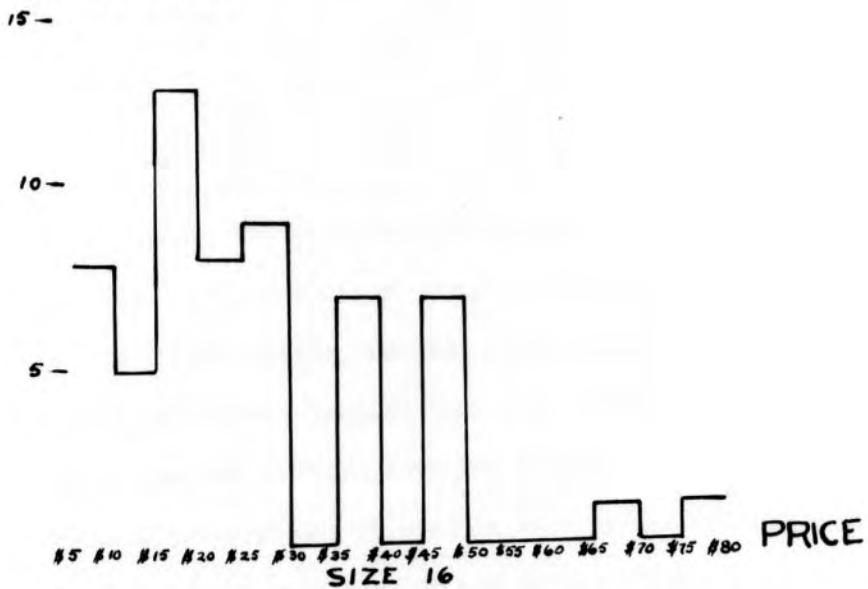


Table III shows that in the price range from \$5.00 to \$40.00 the average number of alterations ranged from 1.5 to 3.3 per dress for size 14, size 16 and all the dresses studied, with two to three alterations occurring in most cases.

In the price range above \$45.00 the average number of alterations was from 2.6 to 8 per dress. The 2.6 alterations were for size 16 in the price range from \$45.00 to \$50.00, while all the other averages were from four to eight alterations.

TABLE III

Average Number of Alterations

Price Levels	Size 14	Size 16	All 300
\$5.00-9.99	1.5	2.5	1.8
10.00-14.99	2	2.1	2.3
15.00-19.99	2	2	2.6
20.00-24.99	2	1.7	2.3
25.00-29.99	2.3	3.3	2.7
30.00-34.99	0	0	0
35.00-39.99	2.9	2.8	2.6
40.00-44.99	0	0	0
45.00-49.99	5	2.6	4.1
50.00-54.99	0	0	0
55.00-59.99	0	8	8.3
60.00-64.99	0	0	0
65.00-69.99	6	0	4.5
70.00-74.99	0	0	0
75.00-79.99	6	4	4.7

Figure 3 shows the size distribution of the dresses studied. 7.66 per cent were in Junior sizes, ranging from sizes 9 to 15; 77.66 per cent were in Misses' sizes, ranging from sizes 10 to 20; 6 per cent were in Women's sizes, ranging from size 38 to 50; and 8.66 per cent were in Half-sizes, ranging from 18½ to 48½.

Sixty-one dresses were studied in size 14 and fifty-nine in size 16. In the comparative study of the relation between sizes and

the alterations necessary Table IV shows that the total number of one hundred fifty-seven alterations in size 14 and one hundred fifty-five alterations in size 16. Size 16 had twenty-eight let out alterations, while size 14 had only nineteen.

For size 14 the number of hems leveled was eleven, while size 16 had twenty hems leveled. Size 14 had forty hems shortened, and size 16 required that twenty-nine hems be shortened. Four hems lengthened for size 14 and three for size 16. In hemline changes there were fifty-five alterations made in size 14 and fifty-two alterations in size 16.

The total number of blouse fronts and backs which were lengthened or shortened at the waistline was the same for both sizes 14 and 16. Two blouse fronts and backs were lengthened for size 16, while size 14 required only shortening of the blouse.

In fitting the waistline by darts or seams the total number fitted for size 14 was fourteen and for size 16 the number was thirteen.

The skirt front and back was raised on three dresses of size 14 and two dresses of size 16.

The alterations made on the hip seams were the same for both sizes 14 and 16, and likewise for the underarm blouse seams.

The shoulder seam was taken up on three dresses of size 14 and on five dresses of size 16.

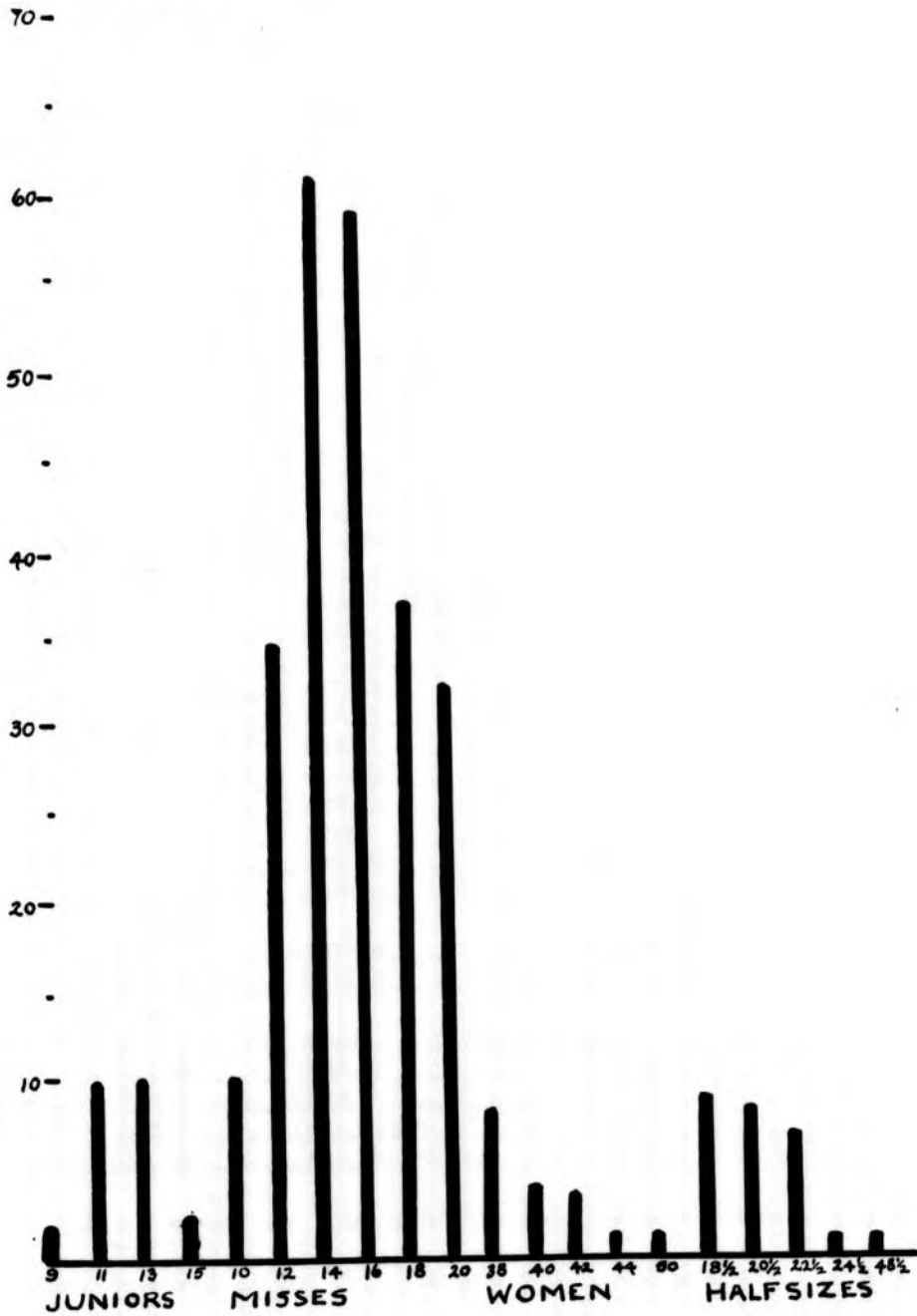
The shoulder line was narrowed on five dresses of size 14 and on seven dresses of size 16.

The sleeve seam was taken up on one dress and let out on one dress of size 14. This seam was taken up on three dresses of size 16.

The sleeve was shortened on three dresses of size 14, and

FIGURE 3
SIZES OF DRESSES ALTERED

NO DRESSES



shortened on one dress, and lengthened on two dresses of size 16, making the total changes three for both sizes 14 and 16.

The underarm dart was taken up on one dress of size 14, while the dart position was changed on one dress of size 16.

The neckline back darts were taken up on two dresses of size 14 and five dresses of size 16.

TABLE IV

Alterations Necessary for Sizes 14 and 16

Alterations		Size 14		16		Totals		
		14	16	14	16	14	16	
Hem Level	Yes	11	20	0	0	11	20	
Hem	Shorten	40	29	Lengthen	4	3	44	32
Waist, Blouse F.	Shorten	9	7	Lengthen	0	2	9	9
Waist, Blouse B.	Shorten	11	9	Lengthen	0	2	11	11
Waistline, Darts	Take Up	2	1	Let Out	0	1	2	2
Waistline, Seams	Take Up	10	9	Let Out	2	2	12	11
Skirt F.	Take Up	3	2	Let Out	0	0	3	2
Skirt B.	Take Up	3	2	Let Out	0	0	3	2
Hip Seam R.	Take Up	12	10	Let Out	3	5	15	15
Hip Seam L.	Take Up	12	10	Let Out	4	5	15	15
Underarm Blouse Seam R.	Take Up	5	3	Let Out	3	3	8	6
Underarm Blouse Seam L.	Take Up	5	3	Let Out	3	3	8	6
Shoulder Seam	Take Up	3	5	Let Out	0	0	3	5
Shoulder Line	Narrow	5	7	Extend	0	0	5	7
Sleeve Seam	Take Up	1	3	Let Out	1	0	2	3
Sleeve	Shorten	3	1	Lengthen	0	2	3	3
Sleeve, Adjust								
Elbow Fullness	Shorten	0	0	Lengthen	0	0	0	0
Underarm, Darts	Take Up	1	0	Let Out	0	0	1	0
Underarm Darts, Change Position	Raise	0	1	Lower	0	0	0	1
Shoulder F. Darts	Take Up	0	0	Let Out	0	0	0	0
Shoulder B. Darts	Take Up	0	0	Let Out	0	0	0	0
Neckline F. Darts	Take Up	0	0	Let Out	0	0	0	0
Neckline B. Darts	Take Up	2	5	Let Out	0	0	2	5

Table V shows the number of alterations which were required on each dress in sizes 14 and 16. The greatest total number of alterations necessary for size 14 was on nineteen dresses which required two

alterations each. For size 16 the greatest total number of alterations necessary was three alterations on each of twelve dresses. The average number of alterations necessary per dress for size 14 was 2.57 alterations; for size 16 the average number was 2.62 alterations.

TABLE V

Total Number of Alterations Necessary on Dresses size 14 and 16

Number of Alterations	Number of Dresses		Total Alterations	
	Size 14	16	14	16
1	20	23	20	23
2	19	10	38	20
3	7	12	21	36
4	5	5	20	20
5	5	4	25	20
6	3	2	18	12
7	1	1	7	7
8	1	1	8	8
9	0	1	0	9
Total	61	59	157	155

Cost of Alterations to the Consumer

Figure 4 shows the cost of the alterations of the dresses. One hundred fourteen dresses were altered with no charge for the alterations. Seventy-five cents was the charge made on the greatest number, or thirty-nine dresses. \$3.00 was the charge on the next largest group, or twenty-eight dresses. The lowest charge was fifty cents on seven dresses, and the greatest charge was \$5.00 on one dress.

The total charge for alterations made on the three hundred dresses amounted to \$357.00, which made the average cost of alterations \$1.19 per dress. If the one hundred fourteen dresses for which there was no charge for the alteration are excluded the average cost of the alterations for the one hundred eighty-six dresses for which there was a charge was \$1.91 per dress.

FIGURE 4
COST OF ALTERATIONS

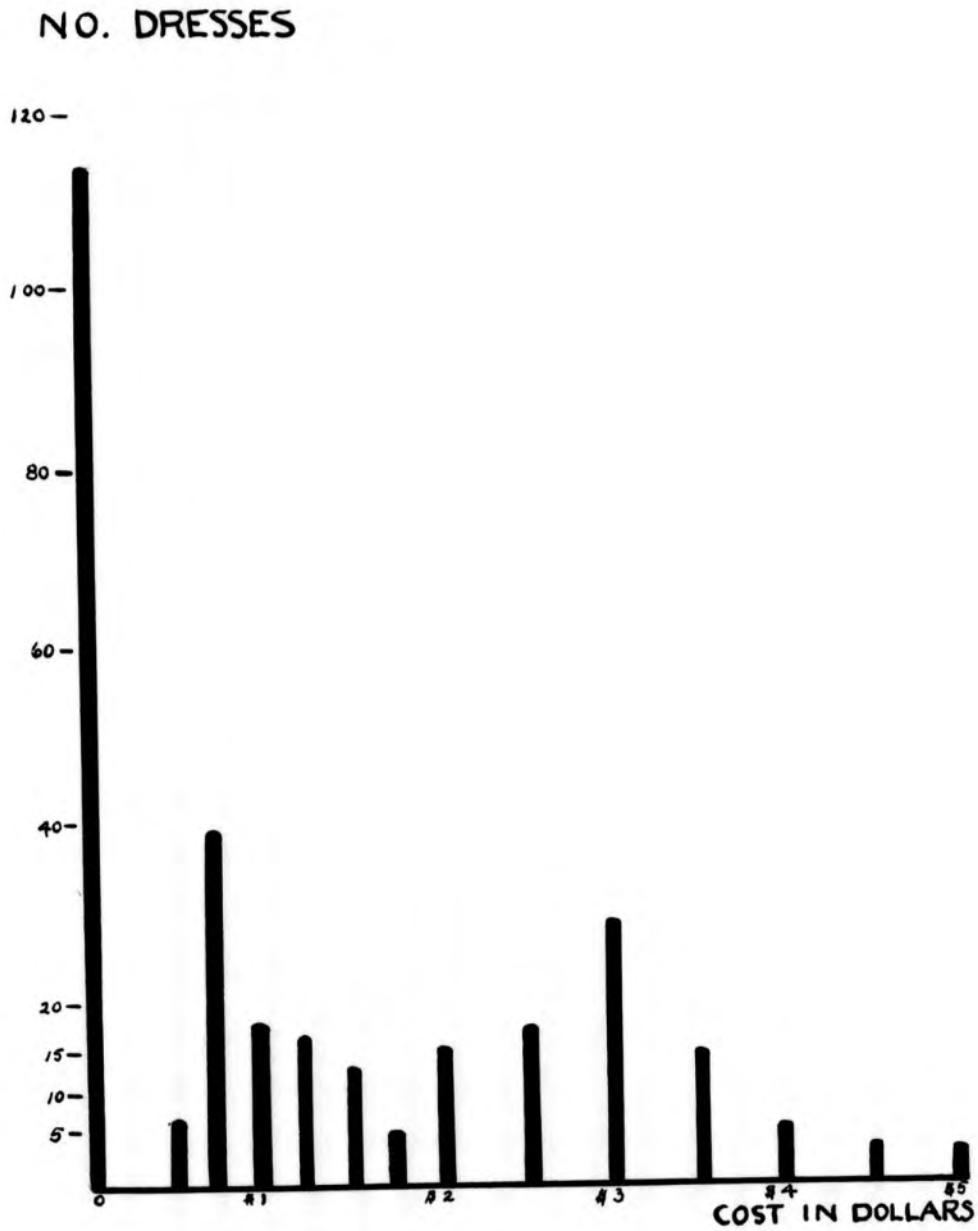


Figure 5 shows the percentage cost of the alterations for the one hundred eighty-six dresses for which there was an alteration charge. The cost of the alteration was divided by the price of the dresses to get the percentage cost of the alteration. The percentages from 1.5 to 2.49 were counted as 2 per cent, 2.5 to 3.49 as 3 per cent, etc. The greatest percentage of cost of the alterations was 4 per cent on thirty-two dresses. The highest percentage of cost was 29 per cent for one dress, and the lowest was 3 per cent for twenty-two dresses. It was interesting to note that the alteration which cost 29 per cent of the cost of the dress was for a dress priced \$5.95 and the alteration cost was \$1.75.

The average percentage of the alteration cost for the three hundred dresses was 4.57 per cent of the price of the dress. The average percentage of the alteration cost on the dresses for which there was a charge for the alteration was 7.46 per cent of the price of the dress.

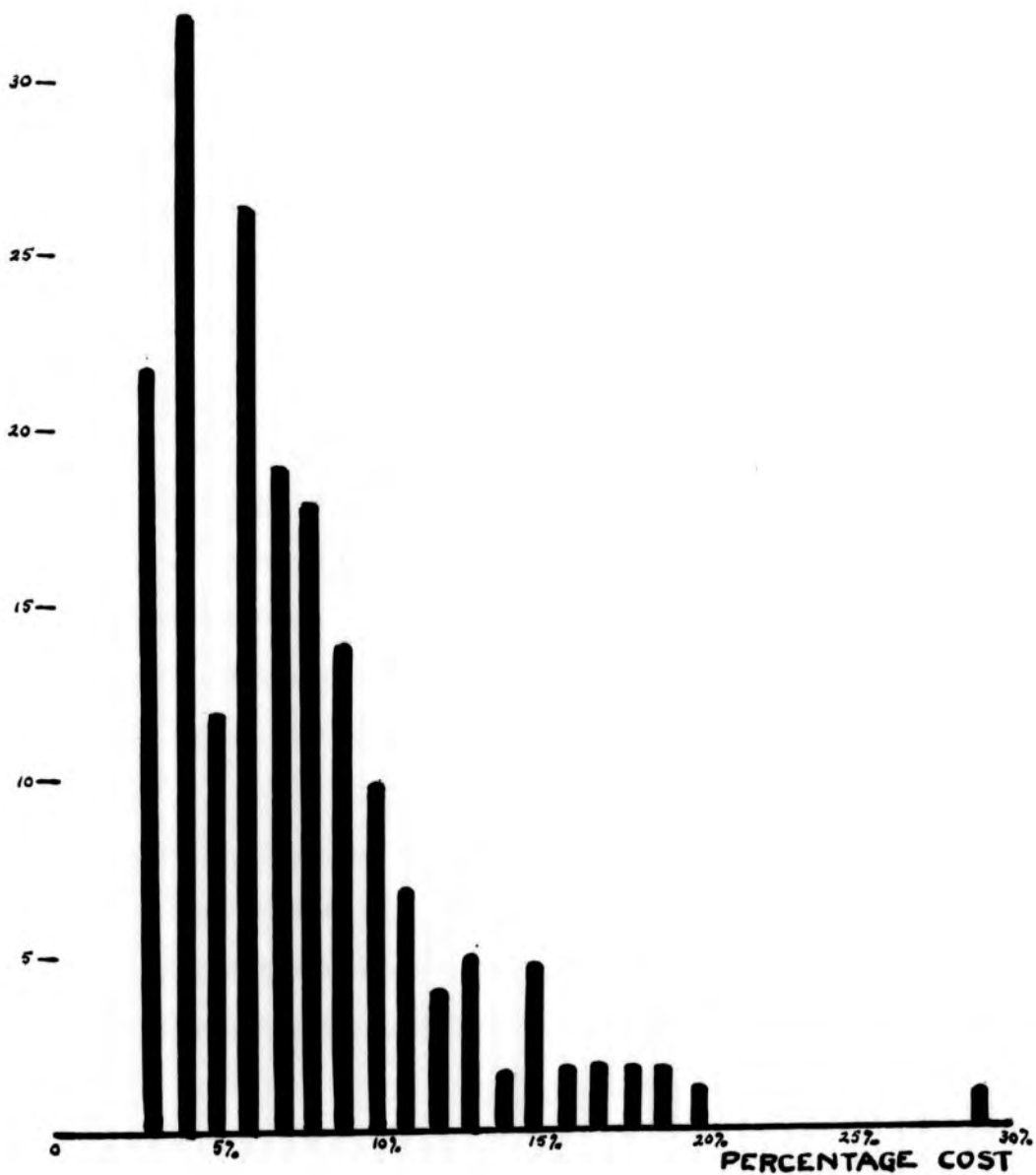
Alteration Possibilities of the Dress

Assuming that all dresses could be taken up to fit, as a result of inadequate seam allowances, it was not always true that they could be let out. In the checking of the number of alterations necessary, in Table I, it was decided to use only those seam measurements that would control the letting out of a dress for the most common fitting problems in discussing the alteration possibilities of the dress.

Although changing the hemline was the most needed alteration in fitting a dress, the measurement of the hem was not discussed, as only seventeen dresses required that the skirt be lengthened. The width of the hem remained almost constant (two inches) throughout the three

FIGURE 5
 PERCENTAGE COST OF ALTERATIONS
 NO. DRESSES FOR 186 DRESSES

35 -



hundred dresses.

To make it worthwhile to let out seams in a dress they must be a certain width. If the underarm blouse seams, side hip seams, placket seams and sleeve seams are one-half inch in width they could be let out on the two seams to give one-half-inch ease at each seam, and leave one-fourth-inch seams. The waistline would require a seam three-fourth-inch wide to give one-half-inch added length in lengthening the blouse and leave one-fourth-inch seam. Using one-half-inch seams for the underarm blouse seams, placket seams, side hip seams and sleeve seams, and three-fourth-inch for the waistline seams as a minimum standard for letting out a dress, it was found that ninety-two dresses could be let out, which was 30.66 per cent of the dresses studied. Two hundred eight did not meet this standard.

In analyzing the number of dresses by sizes which had adequate seam allowances it was found that in size twelve 38.23 per cent, size fourteen 27.86 per cent, size sixteen 42.37 per cent, and size eighteen 32.43 per cent met the standard used. From this we might judge that a size sixteen is cut with more adequate seam allowances than the other sizes cited.

Figure 6 shows the cost of all the dresses in relation to the number which were studied, and the number which had adequate seam allowances to meet the standard. Table VI summarizes how the percentage of dresses which met the standard set up increased with the cost.

FIGURE 6
 PRICE LEVEL OF DRESSES WHICH MET
 LETTING OUT STANDARD
 NO. DRESSES

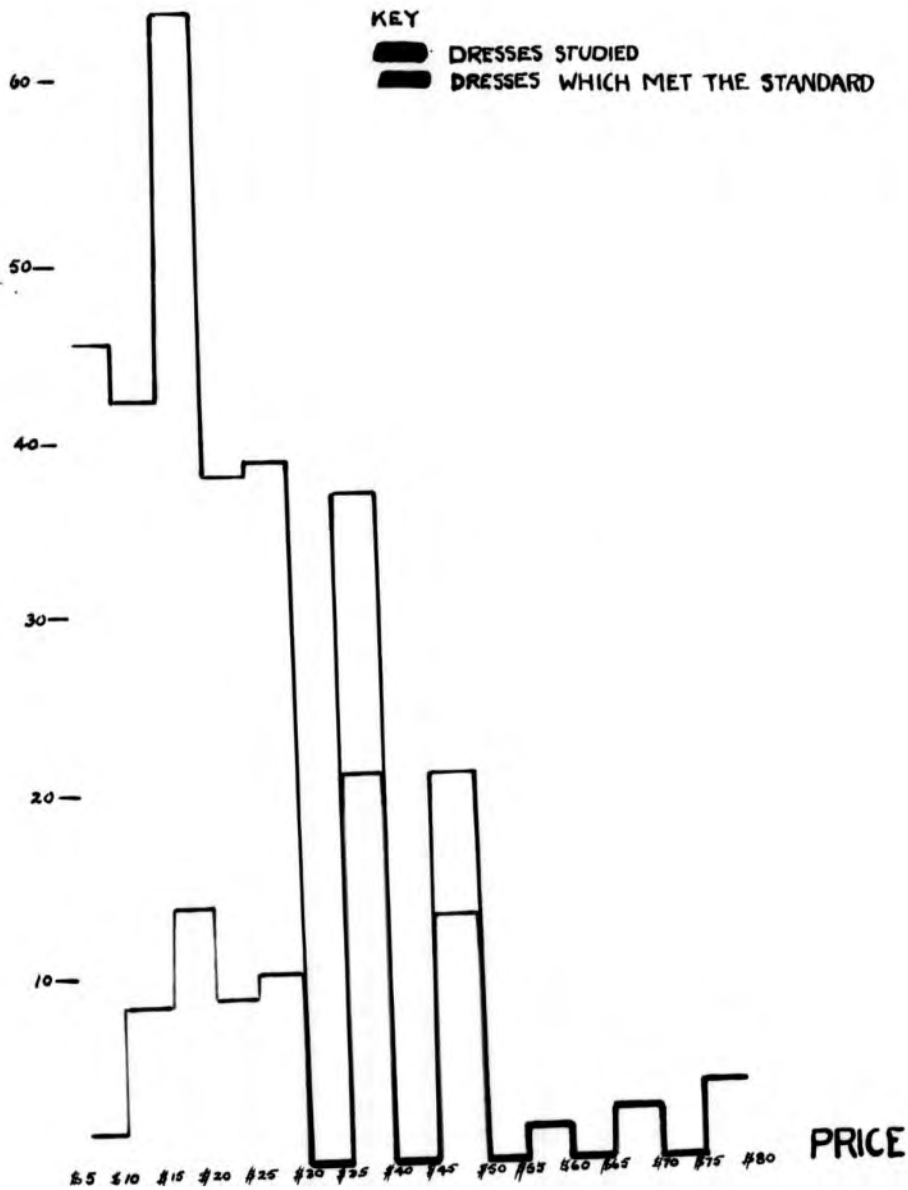


TABLE VI
Price Levels of Dresses which Met the Standard
For Adequate Seam Allowances

Price Levels	Percentage
\$5.00-9.99	4.2
10.00-14.99	20.
15.00-19.99	31.8
20.00-24.99	27.3
25.00-29.99	28.3
30.00-34.99	No Figure
35.00-39.99	61.1
40.00-44.99	No Figure
45.00-49.99	63.6
50.00-54.99	No Figure
55.00-59.99	100
60.00-64.99	No Figure
65.00-69.99	100
70.00-74.99	No Figure
75.00-79.99	100

The width of the underarm blouse seams is shown on Figure 7. The width of the seam measures from one-eighth inch to one and one-half inches. Using the standard set up for letting out the dress, two hundred thirty-two underarm blouse seams could be let out.

The width of the placket seam is shown on Figure 8. One hundred ten dresses had no side placket. Including this one hundred ten, two hundred seventy-one placket seams were one-half inch or more wide and could be let out.

The width of the side hip seam is shown on Figure 9. Two hundred forty-four side hip seams were one-half inch or more and met the standard for letting out.

The width of the waistline seam is shown on Figure 10. Since the waistline seam must measure three-fourths inch to allow for letting out, only seventy-eight waistline seams met the standard. Thirty-three dresses had no waistline seam, and if fitting could be done by

FIGURE 7
WIDTH OF UNDERARM BLOUSE SEAM
NO. DRESSES

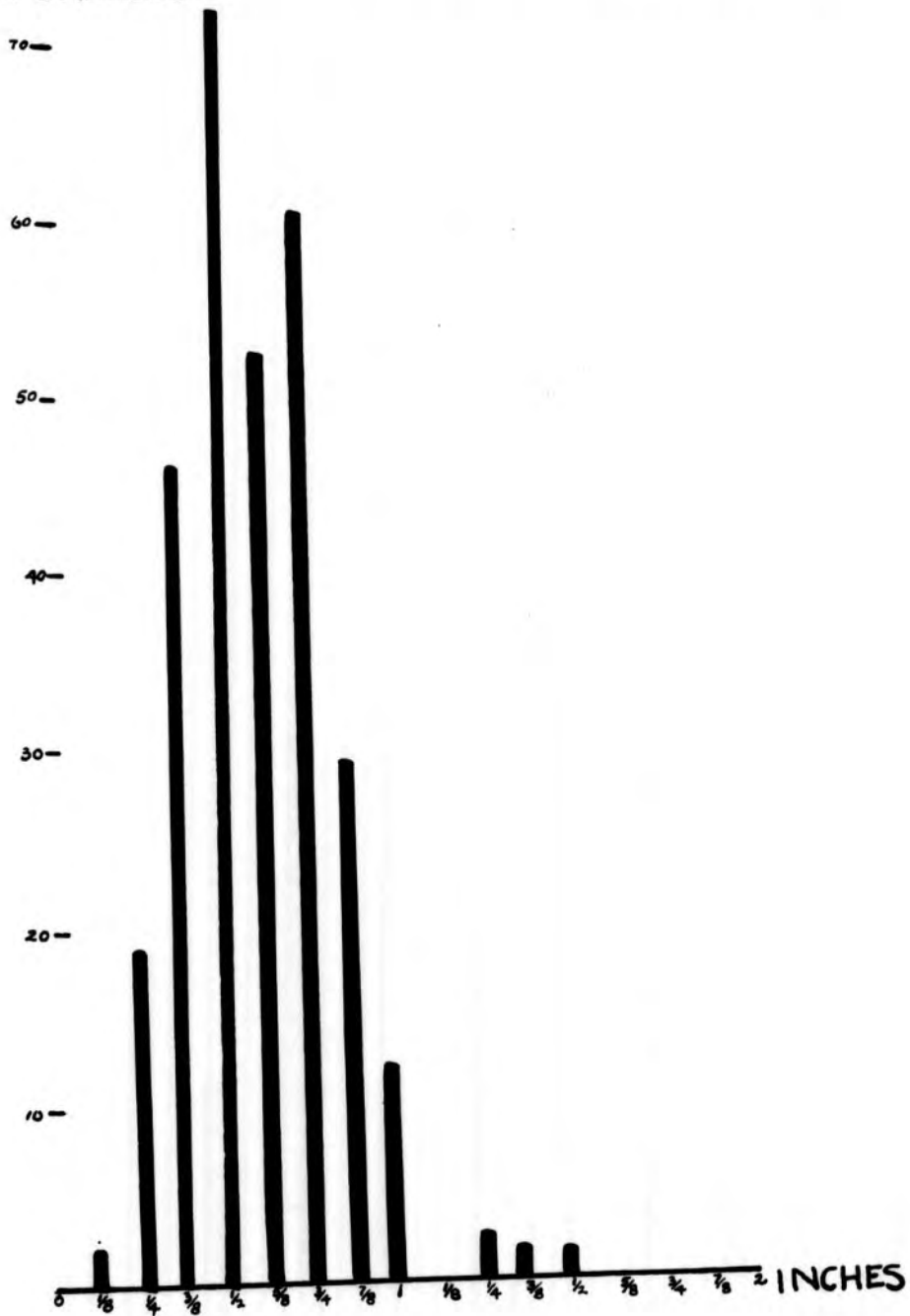


FIGURE 8
WIDTH OF PLACKET SEAM

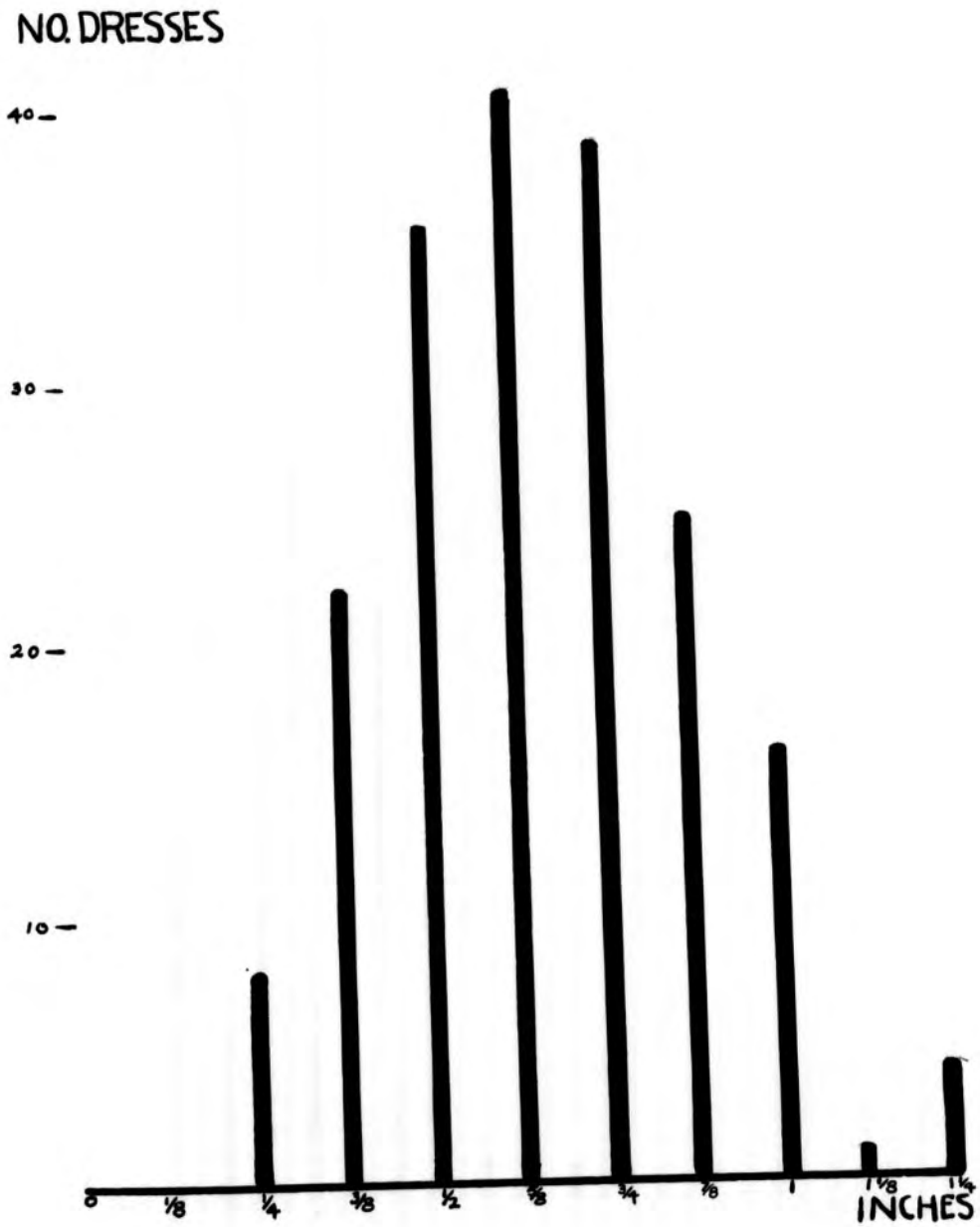
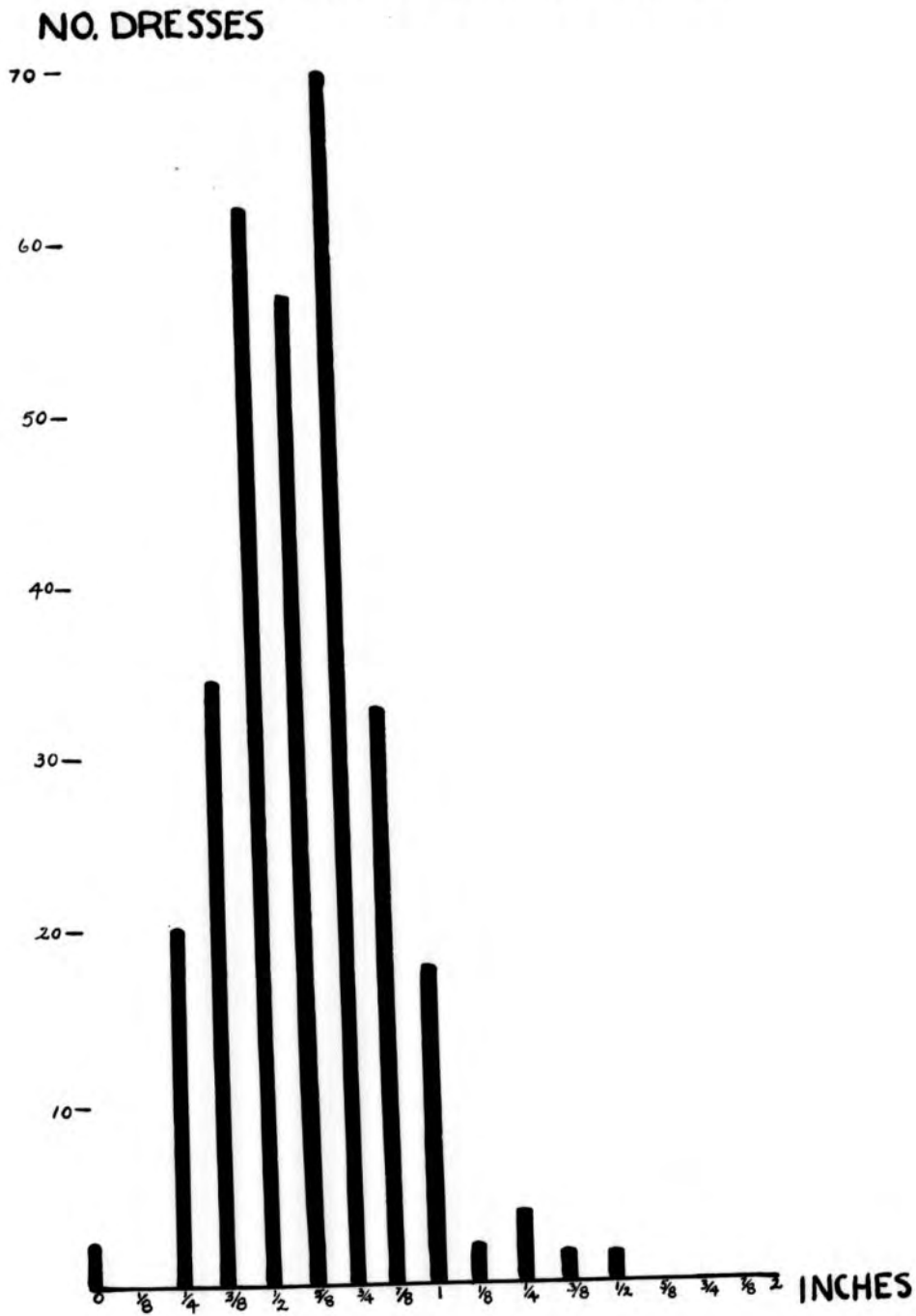


FIGURE 9
WIDTH OF SIDE HIP SEAM



the side seams, then one hundred eleven dresses met the standard for adjusting the waistline seam.

Figure 11 shows the width of the sleeve seams. Ninety-four sleeve seams met the standard for letting out. Fifty-seven had no sleeves, and adding this number one hundred fifty-one met the standard.

FIGURE 10
 WIDTH OF WAISTLINE SEAM
 NO. DRESSES

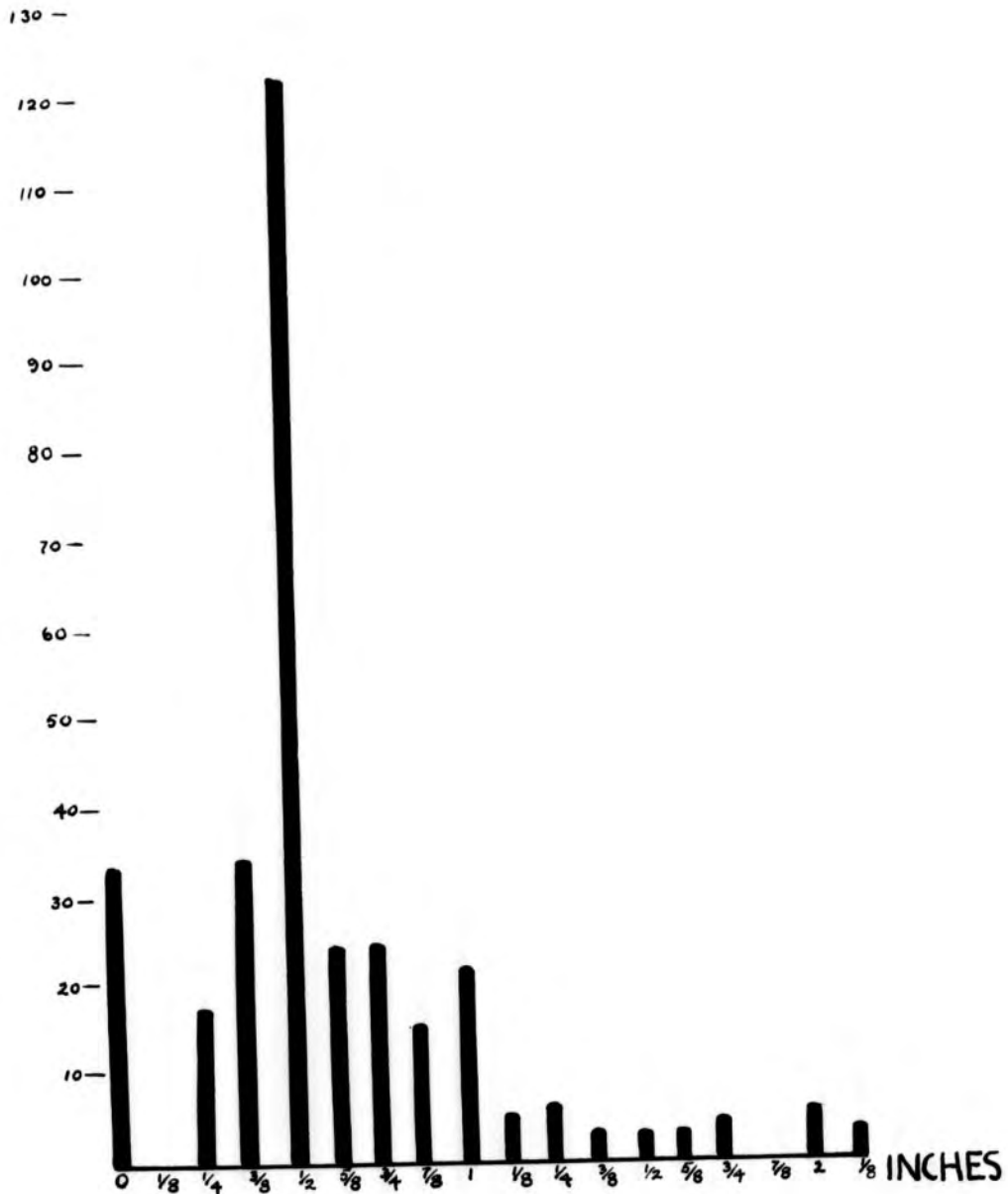
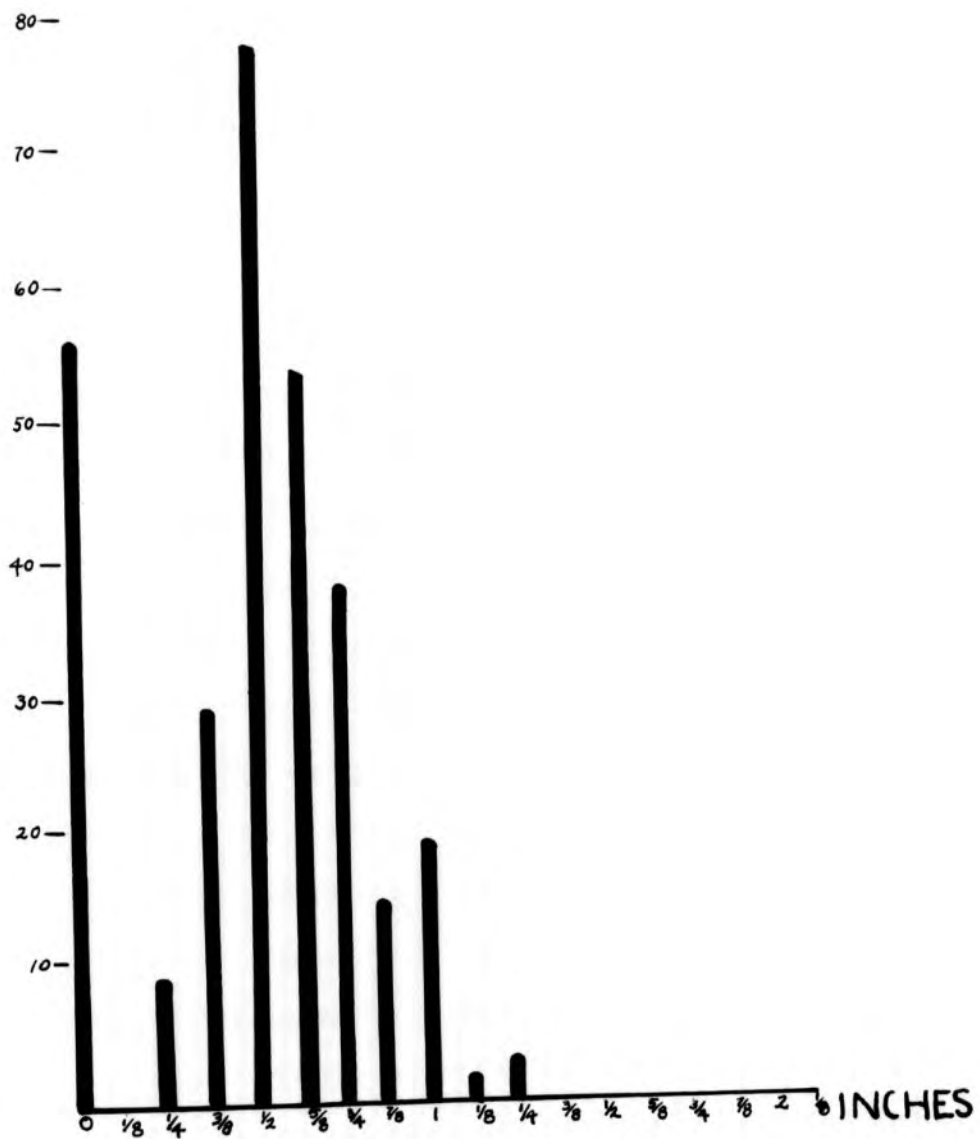


FIGURE 11
WIDTH OF SLEEVE SEAM

NO. DRESSES



CHAPTER IV

SUMMARY, RECOMMENDATIONS, AND SUGGESTIONS FOR FURTHER STUDIES

Summary

The purpose of this investigation of needed alterations in ready-made dresses was to determine (1) the alterations needed, (2) the cost of the alterations to the consumer, and (3) the alteration possibilities of the dresses which require fitting, in Greensboro, North Carolina, a town of about seventy thousand population.

The findings show that the most needed alteration was that of changing the hemline required on about 87 per cent of the dresses. The most common alterations listed in order of their importance were: changing the hemline by shortening or leveling in most cases, fitting the waistline by taking up the seams and darts, fitting the side hip seams by taking up about one-sixth of the dresses and letting out about one-twelfth, fitting the blouse by taking up the waistline seam on about one-sixth of the dresses (the blouse back needed shortening in more cases than the blouse front), and fitting the underarm blouse seams (the underarm blouse seam was taken up in twice as many cases as let out).

The minor alterations necessary on the dresses were: narrowing the shoulder line, taking up the shoulder seam, taking up the back of the neck, fitting the sleeve seam, raising the back of the skirt at the waistline, shortening or lengthening the sleeve, raising the skirt front at the waistline, adjusting the elbow fullness of the sleeve, changing the position of the underarm dart, and taking up the underarm dart.

Of the total number of alterations necessary for all the dresses about 86 per cent were "take up" alterations and about 14 per cent were "let out" alterations. There were three alterations necessary on the greatest number of dresses. The average number of alterations done on the three hundred dresses was 2.65 alterations per dress.

The greatest number of alterations was made on dresses priced above \$40.00. The average number of alterations in the price range from \$40.00 to \$79.95 was 5.4 alterations a dress, and in the price range from \$5.95 to \$49.95 the average was 2.4 alterations.

There was little or no difference in the number and types of alterations necessary in the dresses of the two sizes studied in detail. Size 14 had a total of one hundred fifty-seven alterations, and size 16 had a total of one hundred fifty-five alterations. Size 14 had nineteen "let out" alterations, and size 16 had twenty-eight "let out" alterations. Judging by this, size 16 had to be fitted more often by letting out the seams than size 14. The average number per dress was 2.57 alterations for size 14 and 2.62 alterations for size 16.

More than one-third of the dresses which were fitted were altered free of charge. The prices of the other alterations ranged from fifty cents to five dollars. The average cost of the alterations on the three hundred dresses was one dollar nineteen cents per dress. Alteration charges were made on one hundred eighty-six dresses and the average cost of the alterations on these was one dollar ninety-one cents per dress. The average percentage of the alteration cost to the cost of the dress was 4.57. 7.46 per cent was the average per cent of cost of the alteration on each of the one hundred eighty-six dresses which had

an alteration charge.

Almost two-thirds of the dresses priced between \$30.00 and \$50.00 had seams which were adequate for letting out according to the standard used in this study. All the dresses priced above \$50.00 met this standard. About one-third of the dresses met the standard in the price range from \$15.00 to \$30.00. Only about 4 per cent of the dresses priced from \$5.95 to \$9.99 met the standard. The alteration possibilities of the dresses increased with the cost of the dress.

The seam widths were not consistent throughout the dress, as many more individual seam widths were adequate than the number of dresses that met the standard used for letting out the dress. Size 16 had more adequate seam allowances than size 14.

Recommendations

In conclusion, the findings of this study prompt the following recommendations:

I. Since hemline adjustments comprise 87 per cent of the alterations studied, hemlines of dresses should be put in by the manufacturer so that they could be removed more easily when altered. This should be done by using a chain stitch in applying hem tape and putting in the hem; or by basting in the hem. This would mean the saving of time and money.

II. The width of seams in all dresses should be consistent and adequate to allow for letting out when necessary.

III. The side seams including placket seams should be at least one inch in width, as adequate let-out allowance on these seams would simplify alterations.

IV. Consumers interested in keeping alteration costs at a minimum should insist on being fitted with dresses that are as near their sizes as the market offers.

V. Manufacturers should use common standard for marking sizes, so that individuals could know what general alterations they need.

Suggestions for Further Studies

To contribute additional information closely related to this study research is needed along the following lines:

- I. Causes of alterations.
- II. Consistency in sizing by the manufacturer.
- III. Similar research in larger market areas as a comparison to this study.

BIBLIOGRAPHY

- Anderson, L. V. "Dress Sizes". Consumer's Digest, VII (April, 1940). 36.
- Andres, E. M and Cocanower, D. C. Economics and the consumer. New York: Houghton-Mifflin Company. 553 pp.
- Bowers, Mabel G. A Study of the Relationship between Price and Quality of Construction in Ready-Made Dresses. Unpublished Masters' thesis, Austin, Texas: University of Texas, 1940.
- Brindze, Ruth. How to Spend Money. Garden City, New York: Garden City Publishing Company, 1938. 297 pp.
- Stretching Your Dollar in Wartime. New York: The Vanguard Press, 1942. 197 pp.
- Dana, Margaret. Behind the Label Boston: Little, Brown and company, 1941. 255 pp.
- "Madame Had a Pretty Dress", Atlantic Monthly CLXII (August, 1938), 247.
- Hamblem, Stewart B. and Zimmerman, G. Frank. Wise Spending New York: Harper and Brothers Publishers, 1941. 448 pp.
- National Retail Dry Goods Association, Dress Alterations—Causes and Cause New York: The Association, October, 1938. 13 pp.
- O'Brien, Ruth. Women's Measurements for Garment and Pattern Construction. Miscellaneous Publications Bo. 454. Washington: United States Department of Agriculture, 1941. 73 pp.
- "Plus Sizing". Woman's Wear Daily. LXVII February 25, 1942.
- Rauschenbush, Winifred. How to Dress in Wartime. New York: Coward-McCan Incorporated, 1942. 198 pp.
- "The Fit of Fashion". Woman's Wear Daily. LXX May 1, 1945.
- Thor, Esther K. and Cowles, May L. "How Women Select Clothes". Journal of Home Economics, XXV (August, 1933), 573-6.