GEOGRAPHICAL LOCATION AS A CONTROL IN THE NEW ENGLAND COTTON MANUFACTURING INDUSTRY

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Cotton manufacturing has been a major industrial adjustment in New England for seven score years. At the present time its prominence locally is still undisputed, but a new industrial area in the Southeastern States has wrested leadership from the older region in the nation's manufacture of these textiles. In 1925 the manufacture of cotton goods was the most important industry, accounting for 10 per cent of the total value of New England manufactures [1]. A study of the regional industries according to value added by manufacture in that same year again reveals the fact that cotton manufacturing is in first place with 9 per cent to its credit [2]. Artman, of the Bureau of Foreign and Domestic Commerce, makes the statement that 52½ per cent of New England's income from textile manufacture is derived from the cotton industry [3].

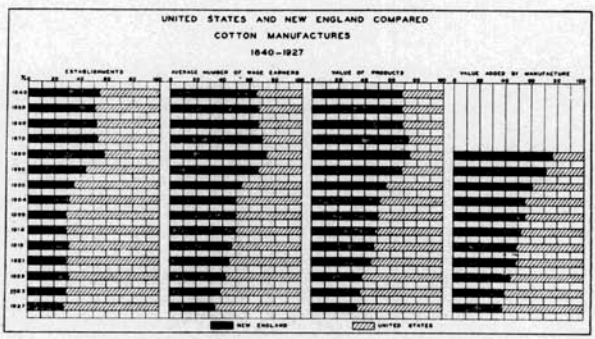

FIG. 1.

A graphical representation shows clearly the relative position of New England in American cotton manufacturing (fig. 1) [4]. All indices denoting textile prominence reveal the declining importance of this activity in the older industrial region. The number of active

spindle hours (fig. 2) [5] is the best index to use in judging the output of a region, and as can be readily seen, the divergence between northern and southern States has been rapidly increasing. The cotton-growing states took the lead in value of products manufactured in 1923; in the number of active cotton spindles in 1925.

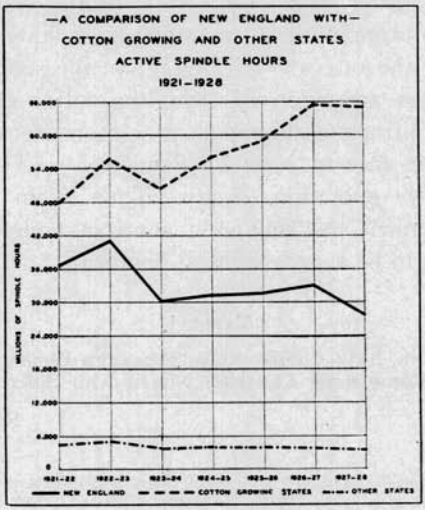

FIG. 2.

One of the principal geographic factors upon which New England cotton manufacturing depends is *location;* but its operation is frequently obscured by current economic conditions.

The supplies of raw cotton and bituminous coal used in New England cotton mills are extra-regional, originating for the most part south of the Mason-Dixon Line. It would seem, now that the Southeast has emerged as the principal producer of cotton textiles, that the wide separation of factory from cotton and coal fields would be a severe handicap to New England cotton manufacturing. This, however, is not the case. The location of the greatest consuming centers on tidewater is an extremely important factor in the movement of these commodities, the influence of low water rates tending to minimize the greater geographical distance of the northern units from their sources of raw material. Three-fourths of the cotton consumed in the Carolinas, the leading textile states of the Southeast, comes from areas west of Mississippi River. This region is also the source of the largest supplies used by New England mills; however, the discrepancy in freight rates will naturally be less because of the increased distance in

haul. Several authorities on this subject have estimated variously the differential. One says that the difference on shipments from the trans-Mississippi regions to the two competing cotton manufacturing districts is less than one-half cent per pound; if the southern mills, however, are supplied from local sources, the difference may amount to two cents per pound [6]. Another makes this statement: "The freight rates on cotton from points west of the Mississippi to points in the three important Southern manufacturing states average from 60 to 90 per cent of the rate to Fall River. In the southern States many of the mill centers are removed from the cotton-growing areas and freight rates on intrastate shipments of cotton are sometimes as high as one-half of the rate to New England" [7]. The following table amplifies the above quotation [8, 9]. Thus, from the standpoint of raw cotton movement the economic control—freight rates—modifies what would seem to be a geographical handicap.

TABLE I

FREIGHT TARRIFFS ON RAW COTTON FROM SELECTED CONCENTRATION POINTS TO CONSUMING CENTERS, NORTH AND SOUTH

From	To	Rates (cts. per 100 #)	
		All-rail	Rail-Water
Memphis	New Bedford, Fall River and Providence	120½	
Memphis	Charlotte, N. C.	89½	
Galveston and New Orleans	New Bedford, Fall River and Providence	123	55½
Galveston and New Orleans	Charlotte, N. C.	100½	
Montgomery, Ala.	Huntsville, Ala.	66	

Transportation charges on tidewater coal delivered alongside in New Bedford average $4.07, the rail charge alone from the mine to the southern port being $2.52, an amount which is but slightly below the total transportation cost from mine to southern factory. The average transportation cost per ton on coal from five southern coal fields to Charlotte, N. C., is $3.10; to Spartanburg, S. C., $2.71 [10]. There is no doubt but that New England mills and public utility companies using southern coal necessarily pay higher prices for fuel than similar units in the South. The relatively small part which such charges represent in the total cost of manufacturing—approximately 5 per cent [11]—makes this factor unimportant at the present time. Accessibility to deep-water transportation, however, operates and has operated ever since 1845, in effecting mill economy. Inland mills pay on the average about $1.25 more per ton than those located on tidewater [12].

One feature of New England's location which all manufacturers recognize as being exceedingly valuable in this day of "hand-to-mouth"

Memphis, and are concerned [16].

The fact that New England is the most important finishing center of cotton goods in this country is significant in making for ease and economy in the transfer of textiles from mill to finishing plant and market. Figure 3 shows the distribution of finishing plants in 1928 [17]. Their greatest density in the Providence region, the locality having the greatest number of spindles (fig 4), and the proximity of this area to New York City puts emphasis on the *location* factor. The need for this kindred industry and the impetus it received in the early days of cotton manufacturing are apparent today, consequently a consideration of New England's location necessarily involves the advantage of this man-made facility.

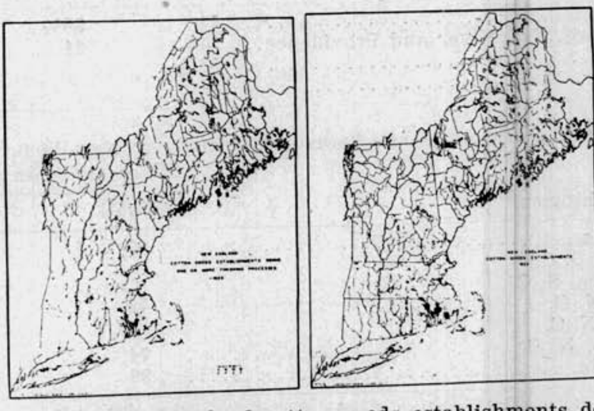

FIG. 3. *(Left)* **New England cotton goods establishments doing one or more finishing processes in 1928.**

FIG. 4. *(Right)* **New England cotton goods establishments, 1928.**

Approximately 75 per cent of the cotton goods manufactured in the Southeast is actually sent to New England for finishing. The location of the established finishing industry with its skilled labor, reputation, and economies operates in offsetting the longer haul necessitated by shipping the grey goods to northern leacheries and dye houses.

The superintendents of such establishments in New England are fully aware that increased quantities of southern products are being finished in the South—that the advantage possessed by allied textile industries of the North, purely from the standpoint of location, is being gradually nullified.

high as one cent per yard [15]. It should be said in this connection, however, that New England centers enjoy no advantages over southeast[illegible] finished products, is proximity to[illegible]is. Kansas City, Excellent rail and water connections with that city, the greatest primary market for finished goods in the country and the center from which style trends emanate, facilitates the distribution of New England products which are to be consumed at home and abroad. Over-night boat service from Boston and the South Shore points predominates as a means of transporting the final product to Manhattan. The convenient location of the wharves within a quarter of a mile of the Worth Street section, the textile trading center of the metropolis, is a decided

TABLE II

RATES ON COTTON-PIECE GOODS—NEW ENGLAND AND POINTS TO NEW YORK.

Point of Shipment	Rates (in cents per 100 lbs.)		
	All-rail	All-water	Rail-water
Boston	51	36½	
New Bedford, Fall River and Providence	51	24	
Lowell	53½		39½
Manchester, N. H.	55		39½

RATES ON COTTON-PIECE GOODS—SOUTHERN CENTERS TO NEW YORK AND BOSTON

Point of Shipment	Rates (in cents per 100 lbs.)	
	All-rail	Rail-water
Atlanta, Ga.	87	84
Greenville, S. C. Spartanburg, S. C. Gastonia, N. C. Charlotte, N. C.	81	77
Greensboro, N. C.	74	69
Danville, Va.	80	56

advantage in moving the goods as the railway freight stations are located farther uptown. A comparison of all-rail, all-water, and rail-water rates between various New England points and New York explains why mill men stress the importance of tidewater location in this connection (Table II) [13, 14].

The greater geographical distance between southern mill centers and New York with the resultant higher freight rates on piece goods, tends to equalize the slight advantage which these points have over New England relative to the movement of raw cotton. If one compares the freight rates shown in Table II, the 400- to 500-mile greater haul is evident. New England manufacturers agree that proximity to markets is more important than proximity to raw materials inasmuch as the time element in placing goods on the market at propitious intervals is capitalized, in some instances, according to one authority as

The several aspects of geographical location as they apply to the movements of raw materials and finished products all operate directly, yet their value to the industry in the present critical period of readjustment is very largely lost sight of, with but one exception: the nearness of New England mills to New York City. This receives unusual attention by local manufacturers and is an outstanding geographical advantage which enables the region to compete for a considerable amount of domestic trade.

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