# RURAL INDUSTRIES: AN EXAMPLE FROM NORTH CAROLINA.

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We may understand by the term "rural industries" either "cottage industries" or "village industries." Though the distinction is of importance it is commonly neglected.

The former are a subsidiary adjunct to farming, designed to supply ready cash to purchase goods not procurable from the land, to help to tide over bad times, or to supplement the subsistence derived from permanently uneconomic holdings. this type are the lace and toy manufactures formerly promoted by the Congested Districts Board, and the rug and basket manufacture of the Carolina Highlands. Their product is of necessity handiwork, and their possible sphere thereby restricted to those luxury trades where the disparity between their cost and that of machine-made articles is not so great but that it can be outweighed by the value set on their variety and craftsmanship; that is, to those cases where the enforced scarcity of the product is part of its recommendation. As a survival of the days of hand-and-tool production, we are sometimes asked on sentimental grounds to take special steps to preserve these cottage industries. But even in those luxury trades where it is feasible the return per unit of labour is ordinarily so low that the name of sweated labour is not inappropriate, and at best they can be but a temporary alleviation of a destitution which needs another and more radical cure.

But it is in the latter of two senses alone that the term is employed for the purposes of this paper. It signifies an industry organised on the factory system and using the machine technique: manufacture is the principal means of livelihood, and agriculture, if it co-exist at all, its subsidiary adjunct. It differs from the normal urban organisation in that its units are

small and dispersed instead of large and concentrated. In North Carolina there are some 300 distinct mill communities dispersed over an area of roughly 10,000 square miles. Some comprise only a single cotton mill or furniture factory and its settlement of employees—and these form the majority: many are tiny places like Bynum of a hundred or so inhabitants, while Spray Cramerton or Kannapolis may run up to six or seven thousand; others may comprise half a dozen distinct communities aggregated but not coalesced at a favourable site, while others again form suburbs of cities of the normal type— Durham, Gastonia and Charlotte are ringed round with such suburbs. But these suburbs are outside the city boundary and the city government. The mill settlements—whether miles from anywhere like Saxapahaw or thickly clustered along the Southern Railroad and in Gaston Co.; whether single, aggregated or suburban—live their own secluded life: their inhabitants have no dealings with their neighbours of country, village or city. Isolation is a chief feature of their condition. This is "village industry" pure and simple.

Economic philosophers, whose genius is admonitory rather than analytical, have found a peculiar satisfaction in the contemplation of "rural industries." They have generally approached the subject from the sentimental or cultural point of view, which is attracted by decentralised organisation and small units as a means of "uplift" in character, in the fullness and happiness of life, and in democratic government. The attractiveness of this method rests on an emotional repugnance to certain features of industrial economy, which have indeed been correctly observed but incorrectly interpreted. Four of these features we may briefly specify.

That standardisation of goods which has been the necessary consequence of large-scale production has been as æsthetically distasteful to them as to the Romantics who dream of a lost mediaeval craftmanship, and has appeared to exert a deplorable influence on the taste as well of producers as of consumers. Still more repulsive has been that process of urbanisation which has been perhaps the most obvious superficial feature of industrial evolution. Again, in those countries which lay outside the pale of last century's industrial development, the foregoing attitudes of mind have been powerfully reinforced by a distrust of the mutual dependence of states created by the localisation of the principal manufactures; the importation from some foreign centre of production of the greater part of its supply of some staple articles has seemed anomalous, dangerous and subversive of "national culture."

Accordingly, it found a ready ally in the sentiment of "nationalism," demanding self-sufficiency in the principal manufactures, irrespective of the cost. At the same time the cause of the deficiency being also one of the principal efficient causes of centralisation, viz., coal and iron deposits, the way was clear for the advocacy of rural industry. More economic than the foregoing has been the belief that a combination of industrial and agricultural activities would serve the recurrent depression and unemployment of the former.

Even on quite general grounds, not specifically economic, these propositions are open to cavil, and that under two heads: first, that the beliefs which they express are not by any means proven to correspond with actual facts; and, secondly, that the beneficial results expected to accrue on the contrary from a decentralisation of industry have not in fact so accrued in those cases where such decentralisation has been found practicable.

The failure of non-standardised, "artistic" or "craft" production to supply the wants of to-day has been amply demonstrated by many attempts, and it is only likely to succeed in the same circumstances as the "cottage industries" mentioned above, i.e., when catering for a limited luxury trade. Where a rural industry in a staple manufacture has prospered—e.g., textiles in North Carolina and Northern Italy—standardisation of both plant and product has been no less indispensable than to their centralised competitors of Massachusetts, Lancashire and Saxony.

The æsthetic and moral ugliness of the industrial city has often been eloquently painted, and its shadows artificially deepened by contrast with the virtues and charms of the country life. The unreality of the first should not blind us to the present reality of the principal picture; but neither should that induce us to accept as final the essentially shallow view that these conditions are a permanent attribute of urban civilisation. a social sore eradicable only by the surgery of dispersing the agglomerated populations, rather than an accidental accompaniment of the process of transition, and susceptible amelioration without destroying the great city as the core of civilised society. Further, conditions in the established rural industry of North Carolina have not been such as to warrant any sanguine expectation that such an organisation is more likely than the urban to promote good living. Although the Department of Public Welfare in the University of North Carolina conducted in the fall of 1924 a fairly intensive survey of a section of Gaston Co., the subject of social conditions is one on which it is desirable to speak with extreme caution,

because it is so often a matter of subjective impressions and judgment, not susceptible of exact statistical measurement, and because there is an exceptionally wide margin of variation from village to village. Nevertheless, certain facts may be definitely stated, which will convey an idea of how much ruralism has performed in the direction of social amelioration.

Wages are considerably lower and hours longer than in New England. The evaluation and economic significance of this will be treated later. It entails the employment of a larger proportion of the family in mill work: a young married couple have both got to work, and pressure is exercised upon parents to put their children into the mill at the earliest moment the law allows. This in North Carolina is at 14 years of age, except in special circumstances where the limit falls to 10. But it is an interesting fact that the age distribution of the population surveyed in Gaston Co. was very markedly skewed by an excess of persons precisely 14 years of age. The proprietary and paternal government of the mill villages, whose foundations we will examine in due course, enables this pressure to be exercised with peculiar effect. The consequence in practice, from this fact and from the general absence of alternative employments, is that there is no escape from the mill: the mill workers form a caste by themselves, isolated, as we have seen, from their neighbours, and despised and distrusted by them. Yet their standard of living, poor and bare as it is, is probably better than their previous condition as tenant farmers, and, as they are more accessible to the State authorities, illiteracy is being gradually eliminated, although among the adults we surveyed we found fully 30 per cent. unable to read or write. The standard of the housing, being completely at the caprice of the company owning the mill, the village and the workers, varies along the whole scale from rickety, unpainted, two or threeroom plank shacks on stilts strewn along a mud path to neat five-room detached cottages in grass-planted "yards" fronting a concrete roadway and each provided with a garage. Mountain View and North Spray might be taken as typical of the two extremes. On general impressions, one would judge the average to be below the median. Water supply, sanitation and sewerage, public cleanliness, health and welfare and the preservation of the peace and of property are also administered at the caprice of the owners, and again display every variation from indifference to benevolent paternalism. In point of fact, for reasons which will appear later, paternalism, whether indifferent or benevolent, is as much a characteristic of the millvillage as its isolation. It may extend up to active welfare work. the maintenance of nurses, of children's playgrounds and "play directors," subsidisation of Y.M.C.A. work, the direct encouragement of community activities, etc. So far they have had but little success in awakening a response among the workers, which is probably due in part at any rate to the very high rate of mobility among them. The psychological aspects of such complete "paternalism" would in itself form a deeply interesting, though of course incommensurable, study. At any rate, the régime does appear to be inconsistent with self-development, and so long as it persists to be an effectual preventive of anything in the nature of freedom, collective consciousness or self-expression of the working class. It must not be forgotten that the ownership of church and school, teacher and preacher confers on the management a powerful control over the psychological make-up of their employees. Anyone who wishes to understand the reaction of the employees to such a system, when they become awake to it, will find it writ large in the history of the strike of the employees of the Pullman Co. in 1894. Life contains less variety, amusement and excitement and opportunities of relaxation in the village than in the city or even in the country.

So much for the question of social amelioration. Observe that it would not be a legitimate answer to point out what might be done with the village if it were ideal. That comparison could only be fairly instituted with the ideal city; and who shall compare two such abstractions and found a policy on the judgment? What I have endeavoured to show is the village as it is.

Subject to the above general criticisms, much of what has been written on the subject of "rural industry" has been a philosophy of social betterment, an exhortation to purge or avoid the sorrows of industrialism rather than the demonstration of a high survival-value in a ruralised system of industrial organisation. Consequently, the strictly realistic or economic approach, concerned only with the more efficient and equitable course of production and distribution, has been neglected. This approach proceeds upon two lines. It brings to light the economic implications of the foregoing arguments and raises the whole question of the circumstances on which the possibility—that is, the likelihood of profitable operation—of a ruralised industry depends.

Of the former sort I will mention only those connected with the idea that a combination of agricultural and manufacturing industry would alleviate unemployment. In proportion as specialised farming for cash—e.g., stock-raising, cotton, flax or wheat growing—progresses, the contention loses force, for

this type of farming is subject to the same economic vicissitudes and fluctuations of employment capacity as the production of manufactured goods, and cannot be relied upon to act as an absorbent of redundant labour. There is assumed, again, a complete integration of the industrial and agricultural economy in both their economic and social organisation, such that no barriers hinder free passage from one to the other. One such potential barrier is the attitude of organised labour. In the improbable event that continuous work, in the factory and on the land, could be assured for all, it would perhaps offer no objection; otherwise, and especially if the industrial demand for labour were consistently less intense than the supply, it most certainly and reasonably would. In North Carolina we found one case, Mountain View, where certain families did attempt to practice this combination. They are the object of much resentment on the part of the whole-time factory hands, on the ground that their not being wholly dependent on factory employment enables them to undercut the others when work is short and so prejudice the position of more necessitous cases. Here, however, the resentment, being unorganised, is ineffective. Still further, any system of alternation must take account of the fact that the periods of agricultural labour are, within limits, fixed, so that the intensity of industrial production would be compelled to accommodate itself, not to the marketing conditions of its products but to the seasons of agricultural labour. Last but not least, is the loss occasioned by the periodical shifting of labour between widely different employments and the intermittent idleness of plant. It is admitted that most of these arguments would lose their force, and the subsequent principal one also, on the supposition that production would not be carried on for a competitive market, but the world consist of small, self-contained and self-sufficient economic units, producing for their own needs only, for in this case it might be argued that the necessary waste was offset by the social advantages accruing from the simpler organisation. But, on the one hand, we have seen that such social improvement is potential but improbable, and, on the other, to build on such a supposition resembles the tendency to substitute dreams for facts, known to psychopathologists as a "flight from reality."

But the core of the economic weakness of the philosophy is this: Unless our belief in the ameliorative possibilities of such a system is strong enough to persuade us to subsidise production thereunder by protection or by bounty—a proceeding requiring a high degree of faith in purely speculative premises—an unescapable condition precedent to its establishment

is the prospect of profitable operation inducing entrepreneurs to take it in hand. The prospect is rendered somewhat remote by certain handicaps peculiar to its rural nature.

It will of necessity be on a small scale, and will generally have to compete with large scale rivals, even in those manufactures which are directly dependent on agriculture in one form or another, e.g., meat packing, flour milling, cotton spinning. Its chances in any particular trade depend therefore upon the effective influence in that trade of the forces which tend to decrease the cost per unit of product of the large unit of production. In those trades where they are relatively weak there is a less remote prospect of their being counterbalanced by other local or temporary circumstances in favour of a decentralised small-scale system of production.

One element to be considered is the extent to which elaborate capital equipment can be substituted for human labour. An imperfect index of this can be found in the relation between the capital value of the concern and the number of its employees, or between its capital value and its total expenses. Table I. gives some figures, which show the textile industry at the bottom of the scale, indicating that this factor of concentration is relatively weak in it.

TABLE I.

Trade.			pital per mployee.		Capital Expenditure.
Furniture (N.C., 1924)			\$1,140	•••	
Cotton (N.C, 1924)	•••	•••	2,000		_
Cotton Goods (U.S.A., 1915)	•••		2,300		
Knitting (N.C., 1924)	•••		2,650		
Iron and Steel (U.S.A., 1915)			6,200	•••	
Agricultural Machinery (U.S.A	, 1915)		7,000	•••	_
Tobacco (N.C, 1924)			7,000	•••	
R. J. Reynolds Tob. Co. (1924)	•••	•••	9,000		
Textiles (England, 1891)	•••	•••	_	•••	0 67
5 Coal Cos. (England, 1891)	•••	•••			2.00
Gas Cos. (England, 1891)	•••		_	•••	5.00

Another is the degree of centralisation of the raw material. Here, generally speaking, the extractive industries are at the upper end of the scale and those which draw their material from the agricultural process at the lower; compare, e.g., iron and dairying. But distinctions can be drawn even in the latter: e.g., the supply of tobacco is much more centralised than that of cotton.

The problems of source and housing of labour force have militated against the profitable operation of a rurally organised industry: their weight naturally varies from country to country and is greatest in undeveloped regions of sparse population and insufficiency of communications; greater in N. C. than in the Irish Free State. Where they have been overcome the mode of their solution has been effective in negativing any immediate prospect of social improvement.

Finally, so long as coal was the principal power-producing agent its cost of transport was decisive in putting a premium upon the concentration of industry near the coal deposits.

Comparatively recently there have been a number of developments which, by increasing the costs and difficulties of urban industry and decreasing those of rural, have made the balance of comparative profitableness more even, or, in other words, have so decreased the relative disadvantage of smaller and dispersed manufacturing units that the addition of local and temporary advantages has given them a reasonable prospect of competing with large-scale products on equal terms.

The increase of rents and taxes and the greater difficulties of urban transport have handicapped the city producer. [In North Carolina the boundaries of the cities cannot be extended to include their mill suburbs without the consent of the owners of the latter, who naturally object, as at present they are free from the expenses of city government.] Besides, the relations between employers and organised labour may render the former willing to attempt to weaken the latter by dispersal. But the most important development has been the improvement in the methods of economical generation and distribution of electrical power, without which decentralisation, however desirable on other grounds, would have been impossible.

Of the local temporary or trade conditions which may act in conjunction with these general influences the following are the most significant: Dispersal of the raw material is an almost indispensable condition precedent. A plentiful supply of labour at a rate of remuneration below the average will overcome many of the disparities of cost. This labour will have to be drawn in the first instance from the agricultural population, and its availability and cheapness will be in inverse proportion to the economic status of the farmer, while its submissiveness will be a function of its independence and backbone while on the land. In these respects, as we shall see, the cotton mill pioneers of the South Atlantic States were in an exceptionally powerful position.

Thus the question of rural industries has been enabled in certain localities to advance from the position of a speculation on social betterment to that of practical politics. Nevertheless, it must not be forgotten that the conflict is essentially one between large and small scale production, at any rate in the staple industries, with the balance inclining in favour of the former, but liable to be outweighed by a combination of circumstances which may be purely local and transitory. Such an industry has developed in North Carolina and the neighbouring States, but, to the best of my judgment, the foundations on which its success rests are transient and derived from the past economic history of the region. It is their connection with that past economic history that it is proposed to illustrate the rest of this Some of the interesting statistical questions I was compelled to leave untouched were an exact calculation of real wages and their district variations, making adjustments for the various allowances, discontinuity of earning, loss from excessive mobility, and variations in the cost of living traceable to the village system, with a comparison between the same and those current in New England; an exact calculation of the comparative efficiency of the Northern and Southern worker, and the immigration of Northern capital-all these are essential to a complete understanding of the conditions of the industry's prosperity and are at present the subject of hot dispute and inexact estimation. Further, the fact that power is practically controlled by two companies and transport by the Southern Railroad has a distinct bearing on the cotton trade's future, and the tendency to increase in scale and become localised, mentioned later, would bear more accurate evaluation.

In describing the conditions which have rendered possible the growth of a successful, small-scale, ruralised, cotton industry in North Carolina and the neighbouring States within the last 35 years and which have governed its geographical distribution, it will be convenient to begin by stating summarily and illustrating with tables the historical, and social basis on which this industry has been built, leaving the relevance of each particular statement to appear in the sequel.

Further, the significance for us of these conditions lies in two facts: the first, that the success of rural industry in the South Atlantic States has been due directly to these conditions; the second, that that same success has brought with it certain consequences which will be indicated later. Do these conditions exist, or are they likely to exist, in the Irish Free State? And are these consequences such that we ought to consider it worth while to take special pains to encourage their occasion?

Or, while encouraging the occasion, are the consequences avoidable? Here again, with regard to each particular condition or consequence, shortness of time compels me to leave the infer-

ence to my audience instead of elaborating it directly.

North Carolina and the neighbouring States fall into four natural divisions. The Tidewater area seldom exceeds 20 feet in elevation above sea level; was formerly covered by dense forests of long-leaf pine, which have now been destroyed by the exploitation of the turpentine industry, leaving only scrub and brushwood; a large part of its area is swamp. The Coastal Plain reaches a maximum elevation of 60 feet; it also was included in the long-leaf pine forest belt and has suffered the same fate as the Tidewater section; well watered and well drained by numerous rivers, it has the most fertile soil in the country; to the west it is terminated by a well-defined scaur, varying in height from 40 to 100 feet, known as the Fall Line. Between the latter and the Blue Ridge Mountains is the Piedmont, a region of rolling hills (up to about 600 feet elevation) and temperate climate, less heavily clothed with a mixed forest of hardwood and conifers, the proportion of the former increasing westwards. The Mountain section, comprising the Blue Ridge, the Unaka Mountains, and the prolongation of the Valley of Virginia between them, does not require special description, save to mention its abundance of hardwood forests and falling water.

This division exercises a determining influence upon the natural resources and supply of labour available for any industrial expansion. Of coal there is little, but abundance of hydroelectric energy, especially in the southern half of the Mountain section. Roughly, 540,000 h.p. have already been installed, and it is calculated that a further 1½ million h.p. are available. The greater part of this development is controlled by the Tallassee Power Co. (216,000 h.p.) and the Southern Power Co. (183,000 h.p.), of which latter John B. Duke, of the American Tobacco Co., was a director. The mountains also supply the lumber which maintains a flourishing furniture industry. The turpentine extraction which flourished on the long-leaf pine has now migrated down the coast to Florida. But the chief resource of the state is agriculture, in which 58.7 per cent. of the population is still actively engaged.

Formerly tobacco was the State's principal crop, and was concentrated in the Piedmont counties along the Virginia border. Since 1880, with the establishment of its manufacture within the State, the crop has expanded enormously and moved eastwards into the richer and less encumbered soil of the

Coastal Plain. (See accompanying table.)

#### TABLE II.

Crop (in millions of lb.)-

Year 1880, 27; 1900, 127; 1919, 280; 1920, 420; 1924, 278.

It will be seen that the figure for 1920 was quite exceptional. 1924—Area under tobacco, 505,000 ac. (7 per cent. of area cultivated).

Value of crop-\$72 million (27 per cent. of all crop values).

After the invention of Eli Whitney's cotton gin in 1795 the growth of cotton increased rapidly and became a slave-crop. It also tended to concentrate in the Coastal Plain on account of the greater fertility of the soil, prevalence of the plantation system, and the presence of negroes. (See subjoined table.)

#### TABLE III.

Crop (in thousands of bales)—

Year 1869, 126; 1909, 615; 1924, 765.

1924—Area under cotton, 1,956,000 acres (28 per cent. of area cultivated).

Value of crop—\$86 million (32 per cent. of all crop values).

Thus it appears that in 1924 these two cash crops accounted for 59 per cent. of the value of all crops grown in N.C. Naturally, in the counties of concentration this percentage was much higher, reaching 84 per cent. in Scotland. This fact has had a most marked effect upon the economic status of the agricultural classes and upon the supply of labour for industry, which we will now consider. But, in passing, we may notice how North Carolina stands to the rest of the world in the production of cotton and tobacco.

#### TABLE IV.

Production of tobacco, 1924 (in millions of lb.)—N.C., 278; U.S.A., 1,243; World, 3,977.

Production of cotton, 1924 (in thousands of bales)—N.C. 765; U.S.A., 10,811; World, 20,070.

The Southern Appalachians are regarded by American patriots as the stronghold of Anglo-Saxondom. One is not therefore surprised to learn that they and the Piedmont were settled between 1740 and 1780 by Ulstermen and Pennsylvania

Dutch, who trekked up the Shenandoah Valley and across the Blue Ridge; the former centred round Mecklenburg Co. in the South and the Dan River in the North, while the latter centred round Wachovia in Guildford Co., now Winston-Salem, the largest city in the State. The English element settled from 1653 onwards in the Tidewater and Coastal Plain. The two settlements were quite distinct in character, slavery and plantations being characteristic of the Coastal Plain, small farms and an objection to negroes of the Piedmont. Since 1870 there has been hardly any immigation; at no census has the number of foreign-born exceeded 0.5 per cent. nor that of persons born in other states 20 per cent.

Population is sparse (55 per square mile, Irish Free State, 112: Northern Ireland, 240). It is thinnest in the Tidewater (39 per square mile) and Mountains, which are undeveloped: here also it is declining. In the Coastal Plain it is denser, but increasing slowly; here negro ratios are much above the state average of 298 per cent. (Tidewater, 404 per cent.; Scotland Co. over 70 per cent.) and the urban ratio much below the state average. In the Piedmont population is relatively dense and increasing fast, with high white and urban ratios. Thus population is concentrating in the Piedmont and Coastal Plain, with a strong tendency for the whites to drift into the former and blacks into the latter. This has been largely effected by industrial development (in which negroes are not used) and the intensification of cotton and tobacco culture which has followed it. But when that industry was being established the chief facts to be taken into consideration were the absolute sparsity of population and dwellings-which created special problems of labour organisation—and its degradation, one of the circumstances just about to be treated, which ensured a copious and cheap supply if it could be handled.

On the emancipation of the slaves at the conclusion of the civil war the want of free capital and even of the means of subsistence by them and the poor whites compelled landowners to get their land cultivated by a system of share tenancy, i.e., the landlord supplies part or all of the working capital and maintains the tenant during the period of growing the crop, which is then shared between them, the cost of the tenant's maintenance meanwhile being deducted from his share. A high and growing ratio of farm tenancy is a marked feature of that group of Southern States (ten cotton-growing) of which N.C. is one. In eight of these from 52 to 80 per cent. of the farms were worked by tenants in 1920. N.C.'s figures are—

#### TABLE V.

Per cent. of farms operated by tenants—Year 1880, 33.5; 1890, 34.1; 1900, 41.4; 1910, 42.3; 1920, 43.5. Of these, in N.C., 54 per cent. were white; 46 per cent. negro; 85 per cent. on a share system; 15 per cent. cash rent.

Share tenancy is of two sorts. The cropper owns nothing at all, not even a fowl or a mule, gets half the corn crop and half the cash crop (but not the cotton seed), and pays half the fertiliser bill. In the whole of N.C. 26 per cent. of the white and 35 per cent. of the negro tenants were of this variety, the proportion being higher in the Cotton Belt. The renter owns his own working capital (i.e., a mule, a mediaeval plough, a wagon and a hoe), gets two-thirds the corn and three-fourths the cash crop (but not the cotton seed), pays two-thirds the fertiliser bill, but is not subject to supervision like the cropper. Nearly three-fifths of the white renters are on land belonging to their own family and looking forward to ownership, but only a very small proportion of the negroes is in this favourable position.

The tenant having no ready money to supply his current necessities, he is supplied on credit either by his landlord or by a supply merchant (i.e., gombeen man) in the nearest town, and the amount accumulated deducted from his share of the proceeds of the cash crop. In Ellis Co., Texas, an investigation in 1917 showed that the interest charged on such credit ran from 10 to 60 per cent., being highest in the cotton sections, and in addition that the average prices entered against it were 55 per cent. above the ruling cash price. Consequently his nominal share of the crop proceeds is more than swallowed up, and besides owning not even a stick of furniture he is in debt. [Of white tenants in Chatham Co., N.C., 51 per cent. were in debt in 1924; and this proportion is higher in the Coastal Plain and higher still among the negroes.] Table V. illustrates this poverty (Chatham Co., N.C., 1924).

TABLE VI.

	Accumulated Wealth.	Gross	Cash Income.
White Owners	 \$4,627		\$626
Black Owners	 2,407		597
White Renters	 526		251
Black Renters	 409		289
White Croppers	 426		153
Black Croppers	 123	•••	197

Note 1.—69 per cent. of the income arrives as a lump sum in the fall from the sale of cotton and tobacco.

Note 2.—In addition to the cash income a certain proportion of their living is derived directly from the land. There are no figures for N.C., but probably they do not depart far from those given (percentage of living derived from farm)—

•	In Texas.		Kentucky.	Tennessee.
By Renters	 34		38	 44
By Croppers	 30	• • •	31	 44

Note 3.—Chatham is a Piedmont County.

Two of the consequences of tenancy of immediate significance to the prospective industrial employer were the mobility (52 per cent. moved each year) and illiteracy. The former has persisted among the tenants who become mill hands (in Gaston Co. we found almost precisely the same index of mobility), a labour turnover which greatly increases the costs and difficulties of industry. Illiteracy is being slowly eliminated, but we found still 30 per cent. of the adult mill hands unable to read or write.

Wasteful and destructive as the system is it persists, for certain very definite reasons. Landowners with large estates are anxious to get the largest net return with the least expenditure of capital, and experience has shown that this can best be attained by putting croppers on it. A survey in the Yazoo Delta, Miss., showed that by employing croppers the landlord got a return of 13.6 per cent. on his investment, by using share renters 11.8 per cent., and by using cash renters 6.6 per cent. The poverty of their own resources prevents purchase by the tenants, an operation which the increase of land values is yearly making more difficult. [In the U.S.A. the average duration of tenancy of a tenant who afterwards purchased a farm was from 1875-84 4.9 years, 1885-94 7.2, 1895-1904 9.0, 1905-14 11.1]

Cotton and tobacco lend themselves peculiarly to tenant cultivation, inasmuch as their culture is intensive but simple, requiring little capital or intelligence, the crop is readily turned into cash, and they are eminently safe from the landlord's point of view. Hence a distinct relationship between tenancy, negro, and cash crop ratios, which are high and increasing in the Coastal Plain. The effect of this condition has been to preserve a continuous supply of cheap labour.

Further, until recently, the discontented tenant had no alternative means of livelihood. But now in the Piedmont they are drifting into the mills, providing an abundant cheap, low-grade labour. Hence in that section tenancy ratios are declining and those remaining are getting better treatment, but the Coastal Plain is a reservoir as yet untapped and daily increasing.

It is on the basis then of these supplies of power, materials and labour that the industry of North Carolina has developed. There are three chief branches of that industry—tobacco, furniture and textiles. Of these the first has advanced along quite different lines to the rest, being concentrated into four large and thirteen small undertakings in Durham, Reidsville and Winston-Salem. The reasons for this follow from the comparison between large and small scale industries we made previously. The source of supply of raw material is relatively small; fixed capital plays a relatively larger part. Since large-scale production has thus a greater relative advantage, the factories had to be located at existing centres of population, and so we find them in these three cities on the edge of the tobacco region, between it and their source of power in the S.W.

The raw material of the furniture industry is widely dispersed over a region unsuitable for industrial development, and large-scale production having a relatively small advantage we find numerous small factories distributed along the railroads bringing down the lumber.

The same remarks apply to the textile trades. Their raw material is drawn from a wide area which is itself too remote from the source of power for it to be conveyed thither economically, so the manufacturing area is situate midway, and is practically identical with the area served by the Southern Railroad. The relative advantage of large-scale operations being small, it is outweighed by the cheapness of labour, and the difficulty of establishing large plants in a sparsely-settled country. The figures in Table VII. (as of 1924) do not convey the whole truth, because a small number of large mills absorbs a large proportion of the employees, etc., and because the present tendency, now that the aggregation of numerous mill communities at specially favourable sites like Charlotte or Gastonia has led to the creation of urban centres, is to build larger and larger units:  $i.\epsilon.$ , the development is away from, not towards, decentralisation. These qualifications will be illustrated in Table VII.

TABLE VII.

Trade. No. of		Capital (in millions of \$)		Output (in millions of \$)		Spindles.		Employees.	
	Mills.	Total	Average.	Total	Average.	Total.	Average.	Total.	Average
Cotton Spinning	386	168	0.435	252	0 653	5,918,000	15,330	83,700	217
18 La:	rgest	54	3 000	79.4	4:410	1,211,000	67,300	22,400	1,244
Strictly vill	lage ones.	114	0.310	172 6	0.470	4,707,000	12,700	61,300	167
Cordage	5	1	0.207	1.729	0 350	5,000	1,000	258	52
Silk	2	3	1.503	2.349	1.175	27,100	13,550	639	320
Woollen	10	4	0.400	3.723	0 372	19,600	1,960	1,557	156
Total							-		
Spinning	413	176	0.426	260	0.630	5,970,000	14,500	86,154	209
Knitting	131	34	0 260	29	0 221	209,000	1,600	12,800	98
Total						1		,	
Textile	544	210	0 386	289	0 530	6,179,000	11,400	99,000	182

This development began in the 'eighties and was the first sign of North Carolina's recovery from Reconstruction. Numbers of small mills, worked by water power, came into existence along the rivers, widely separated from each other. "Local communities squeezed out their last available nickels, elected the leading citizen—doctor, lawyer, merchant, preacher or planter, it made no difference-president of the new manufacturing company and sent him North to seek supplementary aid. Commission merchants, usually in return for an agency for the mills' product, lent working capital, and textile machinery makers took stock in payment for equipment." Mitchell: History of Southern Cotton Mills.] There was plenty of cheap white labour at hand, the cotton was at their doors, and the venture prospered. At first it is probable that it did not come into direct competition with Massachusetts, but only filled in part of the rapid expansion of the textile market in America. But later, and especially in the period of its greatest progress since 1900, it has come directly into competition with Massachusetts and has been able to hold its own. As the reasons for this depend largely on the organisation of the industry, we must first describe this more particularly.

The first companies planting their mills at convenient water sites and the later ones at large in a sparsely populated countryside, were under the necessity of providing housing for the working force they assembled together, and this is still the distinctive characteristic of the mill village, that the company which owns the mill owns also the village—every foot of ground and every building in it, even the church and school, not to mention the teacher and preacher. The houses are let by the week to the workers, and there is never any question of selling them. The power that this gives the employer over the workers may be better imagined than described; but the consequences at first at any rate gave N.C. a substantial assistance in the competition with the established industry of Massachusetts. The relative positions of the two may be seen in

Table VIII.

### TABLE VIII. Number of Cotton Spindles.

	1915.	1920.	1924.
Massachusetts	10,914,000	11,759,000	11,792,000
Ten Southern States	13,139,000	15,1 <i>7</i> 9,000	17,124,000
North Carolina	3,916,000	4,955,000	5,919,000

Besides, plant is now being kept running more continuously in the Southern States and more nearly at its full capacity, resulting in much less unemployment. (See Table IX., figures for the month of April, 1925.)

	$T_{AB}$	LE IX.		
	N.C.	S.C.	Cotton States.	New England.
Total No. Spindles	5,960,000	5,294,000	17,458,000	18,380,000
Total No. active				
during month	5,773,000	5,257,000	16,963,000	14,762,000
Per cent	97	99	97	80
Total No. running				
hours	1,833	1,629	5,131	2,994
	million.	million.	million.	million.
Average per Spindle	308	308	294	163

We shall now glance *seriatim* at the factors on which this competitive ability rests.

There is a saving in the transport of the raw cotton, but it can easily be exaggerated. The State now consumes more raw cotton than it grows (1924—1,100,000 bales consumed and 765,000 grown) and has to import from other states, chiefly South Carolina.

While the question of power is important in that only the use of electric power rendered such decentralisation possible, there does not seem to be any great disparity in cost on this head between New England and North Carolina. But it appears that the present development of hydro-electric power is becoming less adequate to the industrial demands on it, and it is open to question whether it can be greatly increased without a more than proportionate increase of cost. In 1920 93'2 per cent. of all power was hydro-electric, in 1923 only 82'3 per cent.

On the subject of labour costs a number of obstacles to exact calculation present themselves. Even with regard to crude rates there is a very wide disparity between mills, and the official state returns specify only the averages of highest and lowest rates, not the general average, which is little use without knowing the frequency of the several rates. Table X. contains the figures of 1924 for what they are worth.

## TABLE X. Crude Daily Wages.

		Men.	Women.
Range of highest rate		\$8.33—\$2.00	 \$5.83—\$1.50
Average	• • •	\$5.20	\$3.25
Range of lowest rate	•••	\$3.50—\$1.00	 \$2.75—\$0.83
Average	• • •	\$2.00	\$1.30

Probably the average wage for a man is in or about \$3.25 and for a woman \$2.00 per day.

The variation is partly accounted for by the fact that with regard to allowances in the way of rent, light, etc., the practice of companies differs and adjustments effected in the wages accordingly. This lessens still further the value of the above-stated crude money wages as an index of real wages. An inquiry conducted by the Massachusetts spinners, weighing all these factors, resulted in an estimate that the Southern employers had an advantage of 30 per cent. in respect of wage rates.

But along with this must be taken three other facts. The N.C. mills work much longer hours. Of 315 who made a return in 1924, 158 worked a 60 hour week, 164 a 55 hour week, and 3 a 48-50 hour week, compared with the 48 hour week standard in New England. Besides, they formerly employed a much larger proportion of child labour. (See percentages in Table XI. This same table shows how this advantage has passed away since the labour of children under 14 has been prohibited. But in our survey of Gaston Co. it was a noticeable fact that the age group distribution of the population was markedly skewed by an exceptionally large number who were precisely 14.)

TABLE XI.
Percentage of Workers.

		Men.		Women.		Children.
Mass., 1900	•••	49.0	• • •	44 6	• • •	64
N.C., 1900	•••	42.2		34.2	• • •	23.6
1924	•••	58·0	• • •	36.2		5.8

Again, the efficiency of the Southern worker is apparently very much lower. Notwithstanding the fact that he is much better supplied with machinery than his New England competitor [the proportion of machinery to operatives is more than twice as great in N.C. as in Mass. according to the Mass. Bureau of Labour statistics] the value of the output per head is much lower—in N.C. \$3,011 and in Mass. \$3,658 in 1924. This in part, however, is due not to the quantity but to the roughness of the work done, Mass. specialising in much finer spinning.

On the balance, the Southern States have had a considerable advantage in respect of wages. How far that difference was essential to the village industry's continued success I was prevented from investigating in detail. But it seems, as far as one can see, to be of a temporary nature, for the rate of wages is rising steadily, if slowly, and the stream of industrial recruits is showing signs of slackening off; already in the last

quarter of a century it has drawn more than 500,000 people from the Piedmont and Mountain farms. And against this labour cheapness must be set the waste of the excessive turn-over already mentioned.

There appears to be little prospect of a shortening of hours since the organisation which gives the employer absolute control over the workers' housing and feeding as well as work is a most effective preventive of anything like unionisation of labour, and in conjunction with their individualistic and distrustful modes of thought derived from their previous isolated life has given the workers themselves a marked distaste for combination. Thus the Southern industrialists have also been able to escape the loss due to strikes, but not that of periodic unemployment. For while the industry as a whole has prospered, the competition of producers has caused it to expand more rapidly than its market, with the consequence that many or all the mills have periods of short work. The workers laid off have of course nothing to fall back on. But the common practice is, where several members of a family are at work, to lay off only some of them and try to distribute the work there is among the families. Generally they are not pressed for rent, light, heating, etc., at such times, and enabled to get the necessaries of life on credit from the village store, the debts accumulating until a revival of employment enables them to be paid off.

It should be noted that while rural industry cannot avail itself of the advantages of large-scale production, it is not precluded from those of large-scale management. In North Carolina it is the rule rather than the exception for the mills to be combined into "chains" for the purposes of marketing and financial administration. On this matter it is naturally difficult for one not conversant with the unpublished intricacies of local finance to speak with certainty, but I judge that probably one-fifth of the number of mills and a rather larger proportion of the total production is controlled by the Rankin, Cannon, Duke, Erwin, and Lineberger interests.

In conclusion, I would like to summarise what this paper is intended to illustrate. It is very easy and very comforting to propose the establishment of this or that industry as a remedy for disagreeable elements in the existing situation, and in Ireland the decentralised rural organisation has been a particular favourite as a means of securing the profits of industry without incurring the social horrors of industrialism. But it is futile to talk of establishing industries unless certain predisposing conditions are present, and such conditions will need a

high degree of persuasiveness to promote a distinctly rural system of industry. In the history of the textile manufacture in North Carolina every step in its advance and every characteristic of its development were rigidly defined by circumstances over which its promoters had little or no control, and its future also will be beyond their control and dependent on the doubtful continuance of the favourable operation of those circumstances. Be it observed too that some of those circumstances which were favourable to entrepreneurs, e.g., plenty of cheap labour, can hardly be regarded as a source of pride to the state as a whole. As far as the present trend can be distinguished, it seems to be towards a diminution of the rural industry's temporary advantage and its movement in the direction of a centralised large scale manufacture. Further, it appears from this experience that beneficial consequences in a social sense cannot be too sanguinely expected from a system of rural industry, because the facts making such an enterprise profitable militate against them.