AN ESSAY

[From the Atlanta Rice Era, February 1881.

On the Practicability and Profitableness of Manufacturing the Cotton Crop of the South Within Our Own Limits.

To present facts to confirm, as arguments in support of the recommendation of the successful manufacture of the cotton crop of the South within our own limits seems to be entirely superfluous. All the conditions for the successful prosecution of this branch of industry are so fully met, and the favorable combinations of natural resources and great advantages in other respects are so numerous and great throughout the greater portion of the cotton-producing area of the Union, as to place the question almost beyond debate. If practicable, it is pronounced by us to the world, if impracticable here, it is matter of astonishment that the business has been successful or profitable anywhere.

Proceeding exclusively from the northernmost limit of the cotton-planting portion of the South Atlantic States, along the eastern base of the Blue Ridge, in York and Pickens, Carolina, and Georgia, and westwardly, through large portions of Alabama, Mississippi and Tennessee, and west of the Mississippi River, in Arkansas, Northern Louisiana, and the northern and western portions of Texas, is a belt of territory, embracing the territorial line between the cotton-producing and non-cotton-producing regions, not less than one hundred miles in breadth, through a large majority of whose water-powers it is bewildering to the mind to contemplate, and which, may be said to be daily computation, while labor is abundant and strong, and the climatic conditions, as to general even temperature and healthy, are but surpassed in the world.

In Georgia, the belt lies on, and mainly south of a line beginning at Augusta, on the Savannah River, thence down to about Tennille, on the Central railway, and thence to Macon, to Columbus, on the Chattahoochee River, embracing some of the best upland cotton producing counties in the State. There are many very fine water-powers south of this line; but north of it they are numerous, grand and of great volume.

In proof of the foregoing statements as to the peculiar—in reality unlimited—adaptation of the South to this branch of manufacturing industry, a few out of many localities in Georgia, presenting a remarkable combination of advantages, are referred to with the remark, that, modified by climatical conditions, similar general conditions and advantages are common to the several States already mentioned above.

For instance: In Clarke county, in Georgia, according to a statement which has been published, over twenty falls have been improved, embracing an aggregate of nearly three thousand horse-power. The largest, on the Oconee River, a few miles south of Watkinsville, (known as Burnett's,) is estimated at five hundred horse-power; the next largest is on the Middle (Main Fork) of the Oconee, on which Princeton Factory is located, about midway between Athens and Watkinsville, is estimated at four hundred horse-power; the next, on which the Georgia Factory is located, on the North Fork, (formed by Oconee, about four miles north of Athens, is estimated at three hundred horse-power; the next is at Athens, on which the Athens Factory is located, is estimated at two hundred horse-power. These four falls make an aggregate of fourteen hundred horse-power, or about sufficient for one twenty-four inch mill of two thousand spindles and looms of the usual capacity. This amount of water-power is actually employed.

It is believed that the assertion may be safely hazarded, that there are not less than forty counties in Georgia of water-power capacity equaling that of Clarke. Where it is proclaimed that Northern Georgia abounds in water-falls—that the Savannah River on the east, as low down as Augusta, the Chattahoochee, from its mountain sources as low down as Columbus, on the middle western boundary of the State, the broad Oconee, Ocmulgee and Ellis Rivers between; and the Etowah, Coosawatta and Chattooga Rivers in the northwestern portion of the State; and that numerous tributaries, all have falls varying from five to fifty inches constant flow and great volume; and what it is remembered, also, that all the cotton-producing States possess almost equally good available water-powers, the necessities to consolidate the natural advantages of the South for cotton manufacturing very greatly cannot be called all that has been claimed.

At Columbus, Ga., alone, the water-power capacity of the Chattahoochee River has been estimated in approximate three thousand horse-power—as much as the total of Clarke county. The effective fall is fourteen feet, the length of dam five hundred feet, the average depth of the water, when low, six inches; timber, granite, in unlimited, a flow of over twenty-six hundred cubic feet of water per second.

Again: In his very important report on instrumental survey of a line for a projected railway between West Point and Columbus, Ga., Col. L. P. Grant, the able and efficient superintendent of the Atlanta and West Point Railroad, (who is recognized by the profession as one of the ablest civil engineers in the South,) says:

"The total fall of the Chattahoochee, between West Point and the steamboat landing at Columbus, in three hundred and fifty feet. The descent is not uniform, but occurs in successive slants, separated by stretches of comparatively slack water.

"The distance between West Point and Columbus, by the line of this survey, is sixty-three miles—by the course of the river, it is probably about fifty miles. The hydraulic power in the Chattahoochee River, therefore, between the points named, is twenty-five feet per mile. Columbus, and would seem to be demonstrated to be of low, (and, in view of the improvements in the application of, and for commanding water-power, is, probably, very much more.) That actually five thousand horse-power, in the report of Col. Grant, already quoted from, he says:

"About one-third (120 feet) of this descent occurs in three and a half miles, terminating at Columbus."

To approximate the cotton-manufacturing capacity of this stupendous water-power, the following general data, obtained from accomplished results at Atlanta, Ga., will be used as a basis:

At the Atlanta Factory are located horse-power, capable for thousand spindles and preparation, and eighty-five looms, whose manufactured products require about two thousand bales of cotton annually, and afford employment for two hundred and forty operatives. A merchant mill for grinding wheat and corn is also driven by the same power in addition.

Next, at the single fall at Columbus, (fifteen feet,) the estimated horse-power is three thousand, or thirty times more than is employed at Athens by both factory and mill. The cost, consequently, will range one hundred and fifty thousand spindles and preparation, twenty-five hundred looms, consume sixty thousand bales of cotton, employ over seven thousand people, and form a basis for a population of about five times greater.

But from the standard leading of the fall of five to fall, to a point three and a half miles up the river, there is a fall of nine feet, and twenty feet, at such fall eight thousand four hundred spindles and proportion, twenty thousand five hundred bales of cotton, affording employment to seven hundred people, and forming a basis for a population of about three hundred thousand souls. This shows what the manufacturing population, alone, of Columbus City proper is, and does not include the population of the water-power of the Chattahoochee.

Again: Between West Point and Columbus, thirty-eight miles, the fall is about two feet and sixty feet, or twenty-five times greater than that at Columbus. Consequently there is water-power capable of driving two hundred thousand spindles and proportion of looms, and employing over seven hundred thousand people, and forming a basis for a population of about three hundred thousand souls. This shows what the manufacturing population, alone, of Columbus City proper is, and does not include the population of the water-power of the Chattahoochee.

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When it is considered that all kinds of cotton-manufacturing machinery has undergone and is rapidly undergoing improvement, power economized and multiplied by new inventions and modes employed, (especially as they are, as stated from the operation of an old establishment, and a large amount of the power employed is used in grinding grain, it must be conceded that the estimates really fall far short of what they ought to be realized. The other works and employments which will be drawn to, and concentrated around such extensive manufacturing establishments, it may safely be asserted, would create a population double, if not more than double, that estimated above.

The site of the Etowah Manufacturing and Mining Company, on the Etowah River, presents equally large facts. It is about fifty miles north of Atlanta, embraces a combination of natural advantages for manufacturing truly wonderful. Besides six falls of twenty feet each within a distance of five miles, as the property runs "radiating several miles, each, of Allatoona and Stamp Creeks, having good fall." A report made to the Georgia Legislature in 1869, by a special committee appointed for the purpose, says:

"The Etowah River passes through the premises about five miles, with a succession of shoals, affording an aggregate fall of one hundred and twenty feet in full distance, and presents six different localities, each with a fall of from twenty to forty feet, unsurpassed for wide, and never ceasing to constantly excellent in locks, and is an unfailing stream."

Published in the Mills Journal, which I flows are unquestionable quotation of from one of reputation, and of unimpeachable character, in the full control for the Savannah Republican and Macon Telegraph, the following is the full control for the Savannah Republican and Macon Telegraph, the following is the full control for the Savannah Republican and Macon Telegraph, the following is