

county, the surface is broken by the cretaceous formation, which appears again in Crawford county, and extends to the west as far as the Chattahoochee River. In the northern part of the State, covering about half its entire territory, are the Metamorphic, Paleozoic and Eozoic formations of the Appalachian range.

The Silurian strata appear above Augusta on the Savannah river for a short distance, also along the west line of the State from the Nattey river to Dugdown Mountain. Here appear occasional outcrops of Devonian rock; while the northwestern corner of the State is covered with bituminous coal deposits, which extend in rich beds to Northeastern and Northern Alabama. On the western range of the Cohutta mountains are found iron ore deposits. Limestone and coal are found in close proximity to the iron ore deposits, furnishing every facility for the cheap and abundant production of iron. Lumpkin, Hall, Habersham and Forsyth counties produce gold, and until 1852 these mines and "placers" were profitably worked. Gold was first discovered there in October, 1828, by a negro slave. The largest deposits are along the eastern slope of the Alleghanies in a belt about twenty miles wide. A branch mint was established by the Government at an expense of \$80,000, in Dahlonega, Lumpkin county, which in 1853 coined gold to the value of nearly \$500,000; but, as in California, the surface deposits became exhausted, and after the war for the Union, the mint was given to the State for an agricultural college and the expensive machinery sold for old iron. South of the Blue Ridge, lying between the Coputta mountains and next to the gold bearing schists, is a vein of marble. In another place copper is found, also silver and lead, manganese, slate, baryta, and brown hematite, limestone, gypsum, granite, soapstone, sienite, marl, burrstone, asbestos, shales, kaolin, fluor-spar, tripoli, porcelain clay, arragonite, tourmaline, carnelian, emerald, ruby, opal, chalcodony, amethyst, agate, jasper, garnet, zircon, schorl, beryl, rose-quartz, and occasionally diamonds, are among the other minerals of the State. There are sulphur springs in the center of the State, and chalybeate springs of high reputation in the north of Forsyth county. There are also fossil remains of the mastodon, megatherium, mylodon, elephant, *ox*, mollusks and turtles.

Climate.—Along the sea coast the summers are intensely hot and malarial diseases are prevalent. Savannah and the coast region south are sometimes visited by the dreaded scourge of cholera and yellow fever. The mean temperature for July has been known to be as high as 99° Fahr. The northern, hilly and mountainous part of the State has a cool and salubrious climate for the same season of the year, and invalids are taking advantage of this healthful climate, coming to the mountain resorts from all parts of the Union. Lung and throat troubles are almost unknown among the inhabitants of northern and central Georgia. The belt of country running across the State, taking in Augusta, Atlanta and Columbus, is pronounced a very healthful region. The southern and central districts are sickly, particularly in the river valleys, and the climate is perilous in the summer to those unacclimated, though the natives enjoy fair health. The mean summer temperature at Augusta is about 79° Fahr., winter, 47°; at Atlanta, 75°; winter, 45°. At Berne the mean temperature is about 60° for the year.

Soil.—As in its climate, Georgia has a variety of soil. In the northern portion it is thin, but well fitted for grazing purposes. This country, known as the "Cherokee Country," has been under cultivation for unknown years by the Indians, but still produces in its valleys wheat, corn, Irish potatoes, and northern fruits. By fertilizing, cotton may be successfully cultivated, but this product is grown to better advantage on the river lands.

The red soil of the middle section of Georgia is "poor," but may be made productive of tobacco, cotton and cereals.

Peaches, apples, grapes and melons are plentiful. The cotton "belt" is in the southeast section of the State, and rice, sugar-cane and sweet potatoes grow abundantly.

In the southwest the soil is light and sandy. Millions of feet of yellow pine, of great value in ship and house building, are ready to be used. In the southern part of the State turpentine manufactories have been opened up in the forests. In the southeast is the live oak, much valued in ship-building, while the many swamps afford cyprus, cedar and palmetto. The coast and adjacent sea islands are composed of a sandy alluvial soil, in which is mixed decomposed coral. This soil is well

fitted for the production of rice. Further inland are the Pine Barrens, capable of being cleared and cultivated, but chiefly of value for their timber, used in ship-building, and for their by-products. About one-half of the land surface of the State is still timbered, though the original forests of oak, elm, chestnut, maple, fir, beech, poplar and ash have disappeared from the older settled parts.

Products.—The staple agricultural products of Georgia are corn and cotton, though her varied climate and soil make it possible to grow almost anything that is raised in any of the other states, with the exception of a few tropical fruits raised in Florida. Since the war and the loss of slave labor, the cotton product has fallen off until in 1888 there were nearly 200,000 acres more in corn than in cotton. Georgia ranks third in the list of cotton producing States. In 1880 she exported or consumed 814,771 bales valued at more than \$40,000,000. One-fourth of the product of the whole State is raised in the counties of Washington, Stewart, Sumter, Burke, Lee, Dougherty and Monroe.

In the southwestern part of the State a fine quality of wheat is raised, averaging 64 pounds to the bushel. Oats are raised to good advantage, but barley is little cultivated. Sweet potatoes grow readily in the sandy soil, and Irish potatoes are raised largely for the early northern market. Orchard and fruit crops are becoming more valuable, and peanuts or ground-nuts form no small portion of the export products, while the rice plantations form the main feature of agricultural interest on the coast and islands.

In addition to her cotton production, Georgia produced in 1880 23,202,018 bushels of corn, estimated at \$14,000,000; 5,548,745 bushels of oats, valued at more than \$3,000,000; 3,159,771 bushels of wheat. Besides these cereals there were the timber products and 14,409 tons of hay.

The rice crop of 1880 was 25,368,687 pounds; molasses, more than 500,000 gallons; tobacco, 228,590 pounds; sweet potatoes, 4,397,778 bushels; Irish potatoes, 249,590 bushels; butter, 7,424,485 pounds; wool, 1,289,560 pounds.

In 1880 there were 17,838,562 acres in unimproved farms, an increase of about 1,000,000 acres since 1870; 8,204,720 acres were in improved farms, valued at \$111,910,540. The value of farming implements and machinery was \$5,317,416; value of live stock, \$25,930,352; estimated value of all farm products for 1879, \$67,028,929, which gives Georgia the tenth place in agriculture in the rank of States. The value of mechanical products was \$36,447,448. The number of horses in the State in 1880 was 98,520; mules, 132,078; sheep, 527,589; swine, 1,471,003; milch cows, 315,073; working oxen, 50,026; other cattle, 544,812. The State valuation for 1880 was \$554,000,000, a decrease of \$91,895,237 since 1860. The decrease is owing to the loss of slave labor, in a large measure, but the State is steadily growing in the number of acres under cultivation, in the number of manufactories, and the productive capacity of both is increasing, while everywhere indications point to a normal and steady growth.

Trade and Commerce.—The principal exports are cotton and lumber. In 1878 the export of cotton amounted to 610,419 bales, of which 11,309 were of the famous sea-island variety; 988,339 pounds of wool were exported the same year. Her coast-wise and foreign trade employs some hundred vessels of about 20,000 tons' burden. For the year 1878, the total tonnage of the vessels cleared at the Port of Savannah was 642,843 tons; entered, 609,427; while the respective value of each was \$24,014,535, and \$505,596. At the port of St. Mary's, for the same year, the entries were 36,217 tons, valued at \$1,421, and her exports were valued at \$120,186. In the ports of Brunswick and Darien the exports were 32,579 tons, the entries 124,711 tons. These statistics do not do justice to the trade of the State, because the three ports of Savannah, Brunswick and Darien only share the commerce of Georgia with Charlestown, which receives a considerable portion of the exports from the north-eastern portion of the State, while Fernandina, Appalachicola and Pensacola receive those from the southern counties and the western and southwestern districts go to Mobile. Large vessels have but four accessible harbors: Savannah, Brunswick, St. Mary's and Darien, but the sounds formed by the outlying islands are navigable to small craft. The four principal harbors have from fourteen to nineteen feet of water at mean low tide. The ports of entry for the state are Savannah, Brunswick, and St. Mary's.

Counties.—Georgia is divided into 137 counties, which had

the following population in 1880: Appling, 5,258; Baker, 7,304; Baldwin, 13,721; Banks, 7,332; Bartow, 18,628; Berrien, 6,612; Bibb, 26,536; Brooks, 11,712; Bryan, 4,921; Bulloch, 8,034; Burke, 2,076; Butts, 8,307; Calhoun, 7,020; Camden, 6,126; Campbell, 9,923; Carroll, 16,881; Catoosa, 4,716; Charlton, 2,151; Chatham, 41,718; Chattahoochee, 5,664; Chattooga, 10,015; Cherokee, 14,300; Clarke, 11,549; Clay, 6,638; Clayton, 8,004; Clinch, 4,135; Cobb, 20,684; Coffee, 5,057; Colquitt, 2,524; Columbia, 10,452; Coweta, 21,072; Crawford, 8,648; Dade, 4,667; Dawson, 5,832; Decatur, 19,017; De Kalb, 14,452; Dodge, 5,347; Dooly, 12,412; Dougherty, 12,508; Douglas, 6,922; Early, 7,604; Echols, 2,552; Effingham, 5,957; Elbert, 12,929; Emanuel, 9,727; Fannin, 7,236; Fayette, 8,599; Floyd, 24,274; Forsyth, 10,552; Franklin, 11,444; Fulton, 47,588; Gilmer, 8,383; Glascock, 3,575; Glynn, 6,318; Gordon, 11,147; Greene, 17,513; Gwinnett, 19,516; Habersham, 8,668; Hall, 15,239; Hancock, 16,946; Haralson, 5,973; Harris, 15,732; Hart, 9,088; Heard, 8,762; Henry, 14,179; Houston, 22,350; Irwin, 2,696; Jackson, 16,285; Jasper, 11,841; Jefferson, 15,639; Johnston, 4,797; Jones, 11,600; Laurens, 10,040; Lee, 10,566; Liberty, 10,616; Lincoln, 6,405; Lowndes, 11,027; Lumpkin, 6,520; Macon, 11,663; Madison, 7,971; Marion, 8,595; McDuffie, 9,427; McIntosh, 6,110; Meriwether, 17,630; Miller, 3,717; Milton, 6,258; Mitchell, 9,384; Monroe, 18,787; Montgomery, 5,371; Morgan, 14,001; Murray, 8,257; Muscogee, 18,995; Newton, 13,609; Oconee, 6,346; Oglethorpe, 15,369; Paulding, 10,882; Pickens, 6,781; Pierce, 4,522; Pike, 15,825; Polk, 11,916; Pulaski, 14,022; Putnam, 14,512; Quitman, 4,886; Rabun, 4,629; Randolph, 13,306; Richmond, 33,191; Rockdale, 6,828; Schley, 5,301; Scriven, 12,745; Spalding, 12,545; Stewart, 13,981; Sumter, 18,192; Talbot, 14,102; Taliaferro, 7,004; Tattnall, 6,972; Taylor, 8,589; Telfair, 4,816; Terrell, 10,435; Thomas, 20,496; Towns, 3,260; Troup, 20,579; Twiggs, 8,910; Union, 6,429; Upson, 12,396; Walker, 11,012; Walton, 15,617; Ware, 4,135; Warren, 10,872; Washington, 21,928; Wayne, 5,954; Webster, 5,235; White, 5,335; Whitfield, 11,797; Wilcox, 3,106; Wilkes, 15,930; Wilkinson, 12,045; Worth, 5,888. Besides these there were in all the counties of the State 10,564 foreigners.

Principal Cities and Towns.—Georgia has six cities, but none of them are large. Atlanta, the capital, had in 1888, 37,409 persons; Savannah, the chief seaport city, had 30,709; Augusta, the county seat of Richmond county, on the Savannah, 21,891; Macon, county seat of Bibb county, 12,749; Columbus, county seat of Muscogee county, 10,123; Athens, 6,099; Milledgeville and Rome have between two and three thousand. The larger and more important towns are: Albany, Americus, Bainbridge, Brunswick, Cartersville, Covington, Cuthbert, Dalton, Dawson, Eatonton, Fort Valley, Griffin, La Grange, Marietta, Newnan, Thomasville, Valdosta, Washington and West Point. Andersonville, the site of the chief prison of the Confederacy during the civil war, has acquired considerable notoriety. The University of Georgia is located at Athens, while three denominational colleges are situated at Macon. Savannah, Columbus, Americus, Atlanta and Rome are large shipping points for cotton, while St. Mary's, Darien and Brunswick saw and export large amounts of lumber.

Atlanta is in many ways the most progressive of the cities of the State. Its population increased from a little over 21,000 in 1870, to about 37,500 in 1888. It is one of the railway centers of the South, and its manufacturing interests are of large and growing importance.

It is one of the best examples of recuperation among the cities devastated by the civil war. Atlanta is an historic place, as some of the most important maneuvers of the war were conducted about it.

Railways and Canals.—In 1888 Georgia had 3,328 miles of railway, with 2,617 miles in operation, divided between 28 different lines, and valued at about \$82,000,000. Twenty-six miles of the Alabama Great Southern, from Wauhatchie, Tenn., to Meridian, Miss., are in Georgia. West Point and East Point are connected by the Atlanta and West Point line, 81 miles in length. The Atlanta and Charlotte Air Line has 109 miles in Georgia. From Savannah to Bainbridge the Atlantic and Gulf Railway crosses the State, 237 miles in length. The Augusta and Savannah, from Miller to Augusta, has a length of 53 miles; the Brunswick and Albany, from Brunswick to Albany, is 172 miles long. Another line connects Brunswick with Macon, 187 miles; and the Georgia Central joins Savannah, Macon and Atlanta, 294 miles, with a

branch, 17 miles, connecting Milledgeville and Gordon. The Eastern Tennessee, Virginia and Georgia, from Bristol to Chattanooga, Tenn., has a branch to Dalton, 30 miles. The Southwestern, 144 miles, runs from Macon to Eufaula, Ala., with one branch 72 miles long, from Fort Valley to Columbus; another, 23 miles long, from Smithville to Albany; a third from Cuthbert to Fort Gaines, twenty miles; a fourth from Fort Valley to Perry, 13 miles; and a fifth from Albany to Arlington, 36 miles. The Upson Co. road runs from Barnesville to Thomaston; the Western and Atlantic has 121 miles in Georgia; the Elberton Air Line, from Toccoa City to Elberton, has 50 miles of road; the Georgia, from Augusta to Atlanta, with branches from Union Point to Athens, and from Barnet to Washington, has in all 231 miles; the Rome, from Rome to Kingston, 20 miles; the Savannah, Griffin and North Alabama, from Griffin to Carrollton, 63 miles.

The Western and Atlantic, for whose possession several great battles were fought during the civil war, connects Atlanta and the Georgia system with the Louisville and Nashville, Crescent and Tennessee lines at Chattanooga. This places Atlanta on the great highway from the north to New Orleans, Mobile and Florida. The Alabama and Chattanooga runs across the north-west corner of the State. The Cherokee connects Rockmart with Cartersville on the Western and Atlantic. The Columbus and Atlanta, projected between Columbus and Rome, is open to Hamilton, a distance of 23 miles; the North Eastern, from Athens to Lula, 39 miles; the Ocmulgee and Horse Creek, seven miles. Besides these there are several other roads less than ten miles in length. The cost of the railroads now in operation in the State exceeds \$43,000,000, or one-sixth of the entire valuation of the State. There are but few canals in the State.

Manufacturing Interests.—Georgia is now among the very foremost of the Southern States of the Union in her manufacturing and railway interests, and both are increasing in number and extent. During the decade ending in 1870, Georgia had doubled the number as well as the products of her manufactories. Her navigable rivers and abundant railroads afford every facility for transportation of products, while her streams are turning water-wheels and her cotton manufactories bid fair to rival those of New England. In the development of her resources and industries a great future is in store for Georgia.

Since 1870 all the industries have received new impulses. In 1880 there were 3,593 manufactories, of which 38 were cotton factories, with 123,233 spindles and 135 looms; 14 woolen factories with 4,200 spindles and 135 looms. The number of persons employed in all her manufactories was 24,875, of whom 18,937 were males over 16 years of age; 3,619 females over 16, and 2,319 were children. The estimated capital invested in these establishments was \$20,672,410; the wages paid were \$5,266,152; value of material used, \$24,143,939; value of products, \$36,440,948. There are 1,332 grain mills.

	No.	Capital.	Materials.	Products.
		\$916,510	\$8,619,092	\$9,793,898
Cotton Manufactures.....	44	6,537,657	4,039,673	6,513,490
Saw Mills.....	655	3,101,452	3,197,155	4,875,310
Rice Cleaning and Polishing.....	9	263,000	1,309,400	1,488,769
Foundry and Machine Shops.....	39	916,510	612,483	2,299,491
Tar and Turpentine.....	84	513,885	490,355	1,455,739
Iron and Steel.....	14	1,135,900	631,707	990,850
Carriages and Wagons.....	59	275,300	246,470	582,581
Brick and Tile.....	76	212,560	115,747	409,025

Besides these there are leather manufactories, printing interests, meat, leather, tin, copper and iron ware works, ice, rope, twine, logging, tobacco, sashes and blinds, fertilizers, agricultural tools, boilers and other machinery.

Labor is cheap in Georgia; her raw products are found at her very door, saving the cost of transportation; a never-failing supply of water furnishes power for the machinery summer and winter; while the State, to encourage investment of foreign capital, has exempted manufactories from taxation for the term of ten years. Moreover, the southern and southwestern cities furnish a ready market for all her products.

Augusta and Columbus take the lead in the manufacture of

cotton and woolen goods. Athens, Macon, West Point, Decatur and Atlanta are also important centers for the production of these goods. Thomasville, Dalton, Albany, Marietta and Rome are also manufacturing points of considerable importance.

Augusta and Columbus have important advantages over any of the rest, and during the financial depression of 1877 their mills were kept constantly going, and paid profitable dividends. Nor was the same less true of many other plants in the State. The fact that in three years, from 1870 to 1873, the consumption of cotton in her cotton mills increased from 24,820 bales, to 39,122 bales, shows to some degree the growth of her manufactories.

Population.—The census of 1880, gives the population of Georgia as 1,542,180; 817,047 being whites, 725,133, or nearly one-half, blacks. The following shows the increase since 1790:

Census.	White.	Free Col'd.	Slaves.	Total.
1790	52,886	398	29,264	82,548
1800	102,261	1,019	59,406	162,686
1810	145,414	1,801	105,218	252,433
1820	189,566	1,793	149,636	340,995
1830	296,506	2,486	217,531	516,523
1840	407,693	2,755	280,944	691,392
1850	521,572	2,931	381,682	906,185
1860	591,588	3,500	462,198	1,057,286
1870	638,967	545,142	1,184,109
1880	817,047	725,133	1,542,180

The density of population in 1880 was 26.01 to the square mile. In 1880 there were only 10,564 persons of foreign birth in the state. This population is distributed among 136 counties, in which there are eight cities and 134 incorporated towns. Georgia is the twelfth State in the Union in point of population, and tenth in area. Indications point to an increase in population, and especially in her northern districts.

Education.—No organized plan of public instruction was in operation in Georgia previous to the year 1873. Since that time there has been increased interest in public schools among the members of the legislature, but, as yet, no legal provision for normal schools has been made. The liberality of the Peabody fund makes the latter possible and efficient, and the normal scholarships at Nashville, Tenn., received from the same source since 1877, offer some opportunity for professional training. For the year 1887, Georgia held 14 Peabody normal scholarships at Nashville, with 10 graduates in a class of 54. The number of scholars enrolled in 1887 was 319,724. The school age was 6 to 18; average daily attendance, 226,407; number of schools, 7,211; number of teachers, 7,700. The school revenue for the year was \$453,294.

The higher branches are well provided for. As early as 1801 steps were taken to found Franklin College at Athens, and the first commencement was held there in 1804. She admits to her privileges, each year, fifty young men free of charge; also as many as may stand in need of aid who are studying for the ministry. Connected with Franklin University there is a medical department at Augusta and an agricultural department at Dahlonega, with about 250 students, whose tuition is free. The United States government has fixed an endowment of \$240,000 on the State Agricultural and Mechanical Arts department, also connected with the University, which makes the total endowment fund \$376,500. The university, exclusive of its departments of letters and agriculture, has five departments, 13 professors and 200 students, with a library containing over 1,400 volumes. In connection with the university there is a preparatory course and a law school. This is, perhaps, the only true university in the State, and under proper management may become of the highest order.

Mercer University, situated at Macon, has connected with it a theological department, while Oglethorpe University, at Atlanta, is only a college. Atlanta University is for colored students desiring to become ministers. Bowdon College at Bowdon, Emory College at Oxford, Masonic College at Covington, Marshall College at Griffin, have about 45 professors and 1,450 students. There are about 20 female colleges, or academies, or seminaries of high grade. These have 91 teachers and 1,476 pupils, who pay an average fee of \$50 per annum. The Wesleyan Female College, at Macon, was one of the very first female colleges established in the world, having been chartered in 1836. It is under the direction of the M. E. Church

South, and has about 200 students; 1,080 degrees have been conferred since 1840. The Bishop of Savannah has recently established a Catholic institution, called Pio Nono, at Macon. There are also institutions for the blind at Macon, and for the deaf and dumb at Cava Spring, near Rome, which together receive \$25,000 per annum from the State. Though she has no distinctly normal schools, courses for teachers are being introduced into the high schools. In 1880 there were in Georgia no reformatories for either boys or girls, no asylums for idiots or inebriates, and but one or two hospitals for the insane. State prison labor was yet farmed out. The larger proportion of the inmates were colored.

Government, Constitution, Courts, etc.—The present constitution was adopted in March, 1868, by the convention, and ratified in April of the same year. It declares all citizens of the United States residing in its borders citizens of the State. No laws shall be made to abridge or infringe the rights of any of the citizens thereof, or to deny to any person within its jurisdiction the equal protection thereof. The governor is elected by a majority of the people. In him is vested the executive power, and his office holds through a term of four years. In case there is no election by the people, the general assembly choose the governor from the two receiving the highest number of votes. The legislative power is vested in a Senate and House of Representatives, elected by the people for the terms respectively of four and five years. These bodies convene annually, beginning the second Wednesday in January. The general assembly elect the following officers for a term of four years: Secretary of State, Comptroller-General, Treasurer and Surveyor General. The judiciary of the State is vested in a supreme court of three judges, who hold office for twelve years, one retiring every four years, entrusted with appellate jurisdiction only; in a superior court, for each judicial district, having exclusive jurisdiction in cases of divorce, in criminal cases, where penalty inflicted is death or imprisonment, in land title cases and in cases of equity. There is no lieutenant-governor, the president of the senate filling the office of governor when it becomes vacant. The supreme judges and other officers of the judiciary department of the State are appointed by the governor and confirmed by the senate. The governor of the State must be thirty years of age, fifteen years a resident of the United States and six years a resident of the State. Senators must be twenty-five years of age, and two years resident in the State. Representatives must be twenty-one years of age and one year resident in the State. Suffrage is given to all males twenty-one years of age or over, who have resided in the State six months, and in the county where their vote is cast three months, and who have paid such public assessments as may have been made. Defaulters of public money are ineligible to office, also those convicted of felony or larceny, unless pardoned. There is a homestead exemption to the value of \$2,000, and an exemption on personal property to the value of \$1,000, except for taxes, for labor or materials, or money borrowed for the purchase or improvement of said homestead sought to be exempt. Property owned by a woman at the time of marriage, acquired, presented or inherited, is exempt from all liabilities on account of her husband's debts. In her own name she may sue or be sued in matters relating to such property, and in other ways carry on business as if single. Legal interest is seven per cent., but there is no penalty for usury. A debtor may not discharge his liabilities by assignment. Treason, arson, rape, murder and castration are punishable by death. Slavery, or "involuntary servitude," is prohibited by law, except where such servitude is inflicted as a punishment for crime. The law prohibits imprisonment for debt, also the infringement of that "free exercise of personal liberty" guaranteed by the United States to her citizens. Georgia is entitled to 9 representatives in congress, 2 senators, and has 11 electoral votes. Military duty may be demanded of all her male inhabitants between the ages of 18 and 40.

History.—Georgia was one of the thirteen original colonies that ratified the Declaration of Independence in 1776. Not till 1732 was the patent granted, by George II., for whom the state was named, to certain trustees for settling the colony of Georgia; so that this colony was settled much later than any of the rest. Previous to the year 1733, this territory had been explored by both Spain and England, but in this year it was explored by Gen. James Oglethorpe, afterwards governor of the colony, who purchased land of the Creek Indians and laid the first foundations for the city of Savannah.

Among the "trustees" of the colony and those who were deeply interested in it were George Whitefield and the Wesleys,

the founders of Methodism and the eloquent preachers and hymnists of the period. The Cherokee possessed the northern part of the State, together with the whole of the magnificent valley of the Tennessee; the Creeks lived in the southern portion of the State. In 1729 all the country of the Cherokees was ceded by treaty to the English. The object of the colonization of this territory was to found a refuge for debtors, destitutes, orphans and homeless youth, and to form a barrier against the aggressions of the Spanish and Indians in the Carolinas. When war was declared between England and Spain, Gen. Oglethorpe was put in command of the troops of Georgia and South Carolina, and led a futile expedition against St. Augustine.

The military service was at first given as pay for the land, which was divided out, but this proved so irksome that many deserted the colony, going to South Carolina, and the policy of the colony was altered by the offering of fifty acres to each settler. As a result of this, many Scotch and Germans settled in the colony. Ten thousand pounds was given by the English government to aid in the establishment of the colony and twenty-six thousand pounds more was given by private subscription.

In 1742 the Spanish retaliated upon the English for their expedition against St. Augustine and sent a fleet up the Altamaha River, making some captures, but were repulsed by Gen. Oglethorpe, and the fleet of 35 ships and 3,000 men sailed for Florida, after which peace was again restored. The colony grew slowly. Negro slavery which was tolerated in other sections, was prohibited here, and the people became so much discontented that in 1753 complaints were made of the restrictions and the trustees surrendered the charter.

A governor was then appointed and the colony came under the royal government, having the same privileges as to trade, land and negro slavery that were enjoyed by the other colonies. In 1755 a local legislature was appointed and the progress of the colony was rapid. The Cherokees had ravaged the remote settlements during the French and Indian wars. At this time the boundaries were the Atlantic Ocean on the east, the Pacific on the west, Altamaha river on the south and the Savannah on the north. In 1763 the south boundary was extended to the St. Mary's river, so as to take in the rich cotton and rice lands between the St. Mary's and Altamaha. Immigration increased, agriculture flourished, and in ten years from 1753 the exports had increased over £12,000.

At the time of the breaking out of the war of Independence, the population of Georgia was 20,000. Georgia was not hesitant about ratifying the movement that was being made by the other colonies to break away from the rule of the Mother Country. Georgia was more remote from the influences of the royal government, and had less cause of grievance: the colony was more prosperous and so had less to gain by a change, but feeling that the cause of all the colonists was one, she prepared at once to take an active part in the coming struggle. A delegate represented Georgia in the famous Continental Congress of 1775 and a convention of the people held in July of the same year gave full sanction to the revolutionary measures. The same year the governor, Sir James Wright, left the colony. Georgia suffered severely during the war. In 1778 a British force landed in Savannah and Augusta. The Americans, aided by the French, retook Augusta in the following year, but failed to recapture Savannah. After the capture of Charleston by the British, Georgia was not able to participate very actively in the war till Gen. Green repulsed the royal forces from the southern provinces. Georgia formed three constitutions, the first in 1777, the second in 1778, the third in 1779, which last remained in force till Georgia joined the Southern Confederacy in 1861. January 2, 1788, Georgia ratified the Constitution of the United States. The Creeks and Cherokees made repeated assaults upon the more remote colonists till 1790 and 1791, when treaties of peace were established and the western boundary of the State was fixed. In 1802 the large tract of land in South-west Georgia was ceded by the treaty of Fort Wilkinson to the United States government by the Creeks. In 1808 the land west of the Chattahoochee River was ceded to the United States government by the State. This territory amounted to about 100,000 square miles.

The purchase of Louisiana in 1815, and the cession of Florida in 1821, was a great relief to Georgia in putting an end to the wars with the Indians, which were brought about largely by the incitations of the Spanish.

In 1838 the Indians were removed to the Indian Territory, and an end was made of the Indian troubles. It is interesting to note that among these Indians was the first red man who invented an Indian alphabet and a system of figures. Georgia grew in prosperity till at the breaking out of the civil war she was the leading State of the South.

Georgia was among the foremost States to secede. The formal ordinance was rendered January 19, 1861. Her favor was naturally thrown on the side of slavery, though there was a very determined minority against secession. The vote stood 208 to 59. The State was represented by ten members at the Confederate Congress, and the State adopted the Confederate Constitution in March of the year 1861.

Fortifications and war supplies were captured, and laws were enacted to resume control of the lands which had been ceded to the United States Government. The State was active in furnishing aid to the cause, and felt the devastating result of the presence of Northern armies, though during the first part of the war the suffering was confined to those who were enduring the actual hardships of the field and camp. In 1863 the war was carried into her own borders by cavalry raids, and in 1864 Sherman devastated the fairest portion of her land in his "March to the Sea." A strip fifty miles in width was laid waste, followed by great loss of life, from Atlanta to Savannah. In April, 1865, a cavalry force under Gen. Wilson entered Georgia from Alabama, capturing West Point, Macon and Columbus, capturing Jefferson Davis, the President of the Southern Confederacy, near Irwinville.

Andersonville, Georgia, became a centre of interest

by being the seat of the chief Confederate prison. In 1865, humbled in the hands of conquerors, Georgia accepted the terms of Gen. Johnston, and on October 25, 1865, a convention elected by the people assembled, which repudiated the war debt, prohibited slavery and formed a new constitution. A provisional governor was appointed by the United States president, and a new legislature ratified the Thirteenth Amendment of the United States. The Reconstruction Act of Congress, February, 1867, set aside this new constitution and State government, and made a registration of voters, enrolling in all 96,262 white and 95,973 colored citizens.

An election was held for a new constitutional convention, which consisted of 166 delegates. In March, 1868, a constitution was made, and ratified by the people in April, and on the 30th of that month an end was made of military government. Reconstruction was delayed on account of trouble that arose in regard to the test oath, and not till July 15th, 1870, was the act signed for the re-admission of Georgia into the Union, and her senators and representatives given a seat in the Federal Congress. Georgia furnished about 80,000 troops to the Confederate armies. Her largest cities were in ruins, the State bankrupt, industries prostrate, the government revolutionized, at the close of the war; but the State has recovered from its prostration, and under a free people is administering the affairs and developing the resources with a firmer hand and with greater rapidity than almost any State that felt the shock of the war.

Natural Scenery.—The most picturesque scenery in the State is to be found, no doubt, in the mountains of the north. Toccoa falls, near the town by that name, on the Air Line Railway, have a descent of 185 feet, and in the same neighborhood are the rapids of Tallulah, where the water flows between perpendicular walls of rock 800 feet high.

Stone Mountain, not far from Decatur, is much visited, and the Chattahoochee, in its course through the neighborhood of Columbus is very interesting. The mineral springs scattered through the north and central part of the state are becoming favorite resorts for invalids and pleasure seekers. Savannah is one of the most interesting cities in all the South. It has preserved its uniqueness and distinctively southern aspect, notwithstanding the devastation of war. It is much visited by southern tourists, as well as the famous battle ground all the way from Atlanta to Chattanooga. The country, which for months was the tramping ground for opposing armies and the scene of bloody encounters, Kenesaw Mountain now looks down upon in a state of peace and prosperity. The state is also interesting as having been the home and hunting ground, in part, of the most extensive, powerful and intelligent tribes of Indians.

GEORGSWALDE, a town of Northern Bohemia, on the borders of Saxony, in the circle of Leitmeritz, about 35 miles E. of Dresden, with a station on the North Bohemian railway. Besides Old and New Georgswalde, it comprises Wiesenau and Phillippsdorf, the latter a place which since 1868 has attained celebrity through the miracles attributed to its image of the Virgin. Georgswalde was founded in the beginning of the 17th century, and ranks as one of the oldest industrial centres of Bohemia, sharing with the neighbouring town of Rumburg, a reputation for excellent linen. The parish church is a fine building. In 1869 the total population was 8220, of whom 5671 were in Old Georgswalde.

GERA, the chief town of the principality of Reuss-Schleiz, stands in a valley on the banks of the White Elster, 35 miles S.S.W. of Leipsic. It has been all rebuilt since a great fire in 1780, and the streets are in general wide and straight, and contain many handsome houses. The principal buildings are the churches of St. Salvator's and St. Trinity, the town-hall, the buildings of the imperial bank and of the Gera bank, the music hall, and the central hall. Its educational establishments include a gymnasium, a general town school (which contains a real school of the first order, a higher female school, and three citizen schools), a commercial school, a normal school, and a weaving school. The castle of Osterstein, the residence of the prince of Reuss, dates from the 9th century, but has been nearly all rebuilt within the last thirty years. Gera has long been noted for its industrial activity. Its manufactures comprise woollen, cotton, and silk goods, tapestry, artificial flowers, oil-cloth, leather, hats, tobacco, soap, beer, vinegar, chocolate, glue, porcelain and other earthenware, bricks, musical instruments, and carriages.

Gera was raised to the rank of a town in the 11th century, at which time it belonged to the counts of Groitich. In the 12th century it came into the possession of the lords of Reuss. It was stormed and sacked by the Bohemians in 1450, was two-thirds burned down by the Swedes in 1639 during the Thirty Years' War, and suffered afterwards from great conflagrations in 1686 and 1780, being in the latter year almost completely destroyed. The population in 1875 was 20,810, nearly all of whom are Protestants.

GERACE or **GIERACE**, a town of Italy in the province of Reggio di Calabria, about 59 miles from Reggio on the railway between that city and Monasterace, is situated on a limestone hill not far from the coast, 30 miles N.N.E. of Cape Spartivento, between the rivers Merico and Novito. It is the seat of a bishop and of a subprefect, and has a civil and criminal court dependent on that of Catanzaro. The citadel, formerly of great strength, was reduced to ruins by the earthquake of 1793; and the cathedral was at the same time so severely injured that only a portion of the crypt remained available for public worship. There is a good trade in a white wine known as *Vino Greco*; silk is manufactured; and the warm sulphur springs of the neighbourhood attract patients to the town. About 5 miles off, at Torre di Gerace, are the ruins of the Greek city of Locri Epizephyrii, from which Gerace derived materials for its buildings, and more especially fine marble columns for the cathedral. The population in 1871 was 7257. This Gerace is not to be confounded with Gerace Siculo, a town of between 3000 and 4000 inhabitants, 4 miles from Cefalu, which was the first place in Sicily erected into a marquisate.

GERANIUM is the name of a genus of polypetalous exogenous plants, which is taken by botanists as the type of the natural order *Geraniaceæ*. The name, as a scientific appellation, has a much more restricted application than when taken in its popular sense. Formerly the genus *Geranium* was almost conterminous with the order *Geraniaceæ*, which latter had then a more limited meaning than is given to it by those of our leading botanists of the present day who include in it the *Tropeolaceæ*, the *Oxalidaceæ*, and the *Balsaminaceæ*. Then as now the geranium was very popular as a garden plant, and the species included in the original genus became widely known under that name, which has more or less clung to them ever since, in spite of scientific changes which have removed the larger number of them to the genus *Pelargonium*. This result has been probably brought about in some degree by an error of the nurserymen, who seem in many cases to have acted on the conclusion that the group commonly known as *Scarlet Veraniums* were really geraniums and not pelargoniums, and have in consequence inserted them under the former name in their trade catalogues. In fact it may be said that, from a popular point of view, the pelargoniums of the botanist are better known as geraniums than are the geraniums themselves.

The species of *Geranium* bear the English name of Cranesbill, and consist mostly of herbs, of annual or perennial duration, dispersed throughout the temperate regions of the world. They number nearly a hundred, and bear a considerable family resemblance. The leaves are for the most part palmately-lobed, and the flowers are regular, consisting of five sepals, five imbricating petals, alternating with five glandules at their base, ten stamens, and a beaked ovary. Some dozen or more species are natives of the British Isles; and many of those of exotic origin form handsome border plants in our gardens of hardy perennials. Amongst these *G. ibericum*, *G. platypetalum*, *G. sanguineum*, *G. Backhousianum*, and the double-flowered varieties of *G. pratense* are conspicuous. The genus is not without its virtues, *G. maculatum* being the alum-root of North America, used there as an astringent in diarrhoea, dysentery, and such like complaints, while the native Herb Robert of English hedgesides, *G. Robertianum*, which is both astringent and aromatic, is used as a remedy in nephritic disorders.

From these regular-flowered herbs, with which they had been mixed up by the earlier botanists, L'Heritier in 1787 separated those plants which have since borne the name of *Pelargonium*, and which, though agreeing with them in certain points of structure, differ in others which are admitted to be of generic value. One obvious distinction of

Pelargonium is that the flowers are irregular, the two petals which stand uppermost being different—larger, smaller, or differently marked—from the other three, which latter are occasionally wanting. This difference of irregularity the modern florist has done very much to annul, for the increased size given to the flowers by high breeding has usually been accompanied by the enlargement of the smaller petals, so that a very near approach to regularity has been in some cases attained. Another well-marked difference however remains in *Pelargonium*: the back or dorsal sepal is furnished with a hollow spur, which spur is adnate, *i.e.*, joined for its whole length with the flower-stalk; while in *Geranium* there is no spur. This peculiarity is best seen by cutting clean through the flower-stalk just behind the flower, when in *Pelargonium* there will be seen the hollow tube of the spur, which in the case of *Geranium* will not be found as it does not exist, but the stalk will appear as a solid mass. There are other characters which support those already pointed out, such as the absence of the glandules, and the declination of the stamens; but the features already described offer the most ready and obvious distinctions.

To recapitulate, the geraniums properly so-called are regular-flowered herbs with the flower stalks solid, while many geraniums falsely so-called in popular language are really pelargoniums, and may be distinguished by their irregular flowers and hollow flower stalks. In a great majority of cases too, the pelargoniums so commonly met with in greenhouses and summer parterres are of shrubby or sub-shrubby habit.

GERARD OF CREMONA (1114–1187), the mediæval translator of Ptolemy and Avicenna, was born at Cremona, Lombardy, in 1114. Dissatisfied with the meagre philosophies of his Italian teachers, he went to Toledo to study among the Moors, who were at that time the chief depositaries and interpreters of the wisdom of the ancients; and, having thus acquired a knowledge of the Arabic language, he appears to have devoted the remainder of his life to the business of making Latin translations from its literature. The date of his return to his native town is uncertain, but he is known to have died there in 1187. His original version of Avicenna's *Canon of Medicine* was the basis of all the very numerous subsequent Latin editions of that well-known work; and the Latin translation by which alone Ptolemy's *Almagest* until the discovery of the original *μεγάλη σύνταξις* was known to Europe is also ascribed to him. In addition to these, he translated various other treatises in medicine, mathematics, and astronomy, to the number, it is said, of sixty-six; but some of the works with which he has been credited (including the translation of the *Almansorius* of Er-Razi or Rhazes) are more probably due to a later Gerard also called "Componensis," but more precisely "de Sabloneta." See Boncompagni, *Della Vita e delle Opere di Gherardo Cremonense e di Gherardo da Sabbioneta*.

GERARD, variously surnamed TUM, TUNC, TENQUE, or THOM (c. 1040–1120), founder of the order of the knights hospitalers of St. John or of Malta, was born at Amalfi about the year 1040. According to other accounts Martigues in Provence was his birthplace, while one authority even names the Château d'Avesnes in Hainault. Whether as a soldier or a merchant, he in the course of the latter part of the 11th century found his way to Jerusalem, where a hospice had for some time existed for the convenience of those who wished to visit the holy places. Of this institution Gerard became guardian or provost at a date not later than 1100; and here he organized that religious order of St. John which received papal recognition from Pascal II. in 1113, by a bull which was renewed and confirmed by Calixtus II. shortly before the death of Gerard in 1120.