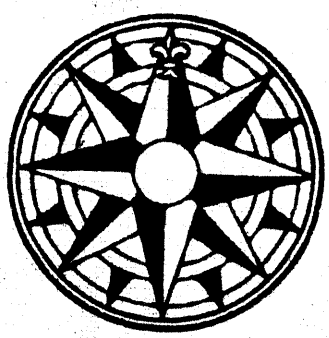
DODGE'S GEOGRAPHY

OF DELAWARE

HARTER



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THE GEOGRAPHY OF DELAWARE

By George A. Harter, *President of Delaware College, Newark, Delaware.*

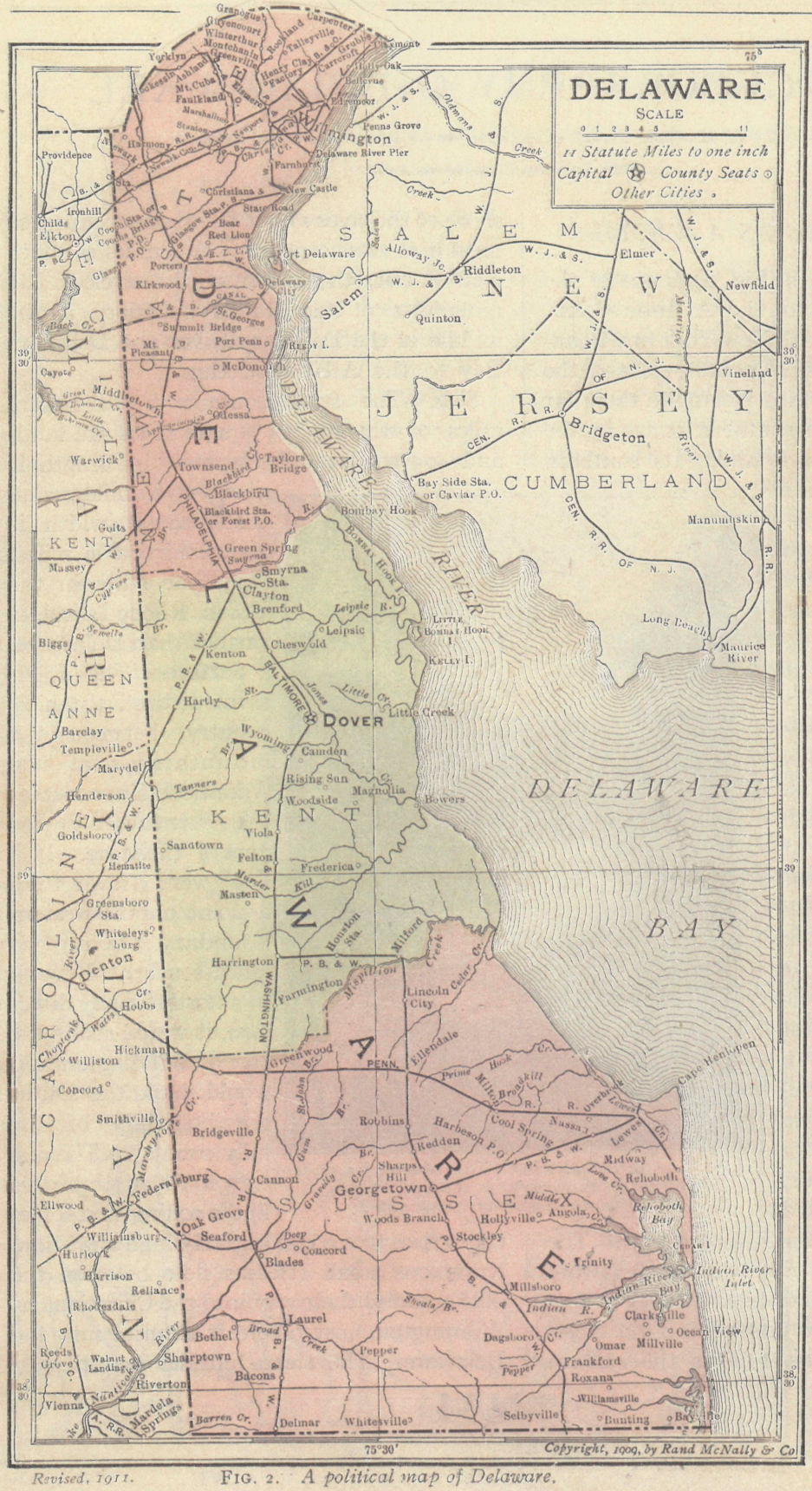
I. DELAWARE AS A WHOLE

Location. Delaware (Fig. 2) is one of the seven Middle States of the Atlantic Coast. Although classified with New York and Pennsylvania, in its physical conditions and the character of its people it resembles them far less than it does the southern states in the group, especially Maryland. Its southern and western boundaries are a part of the celebrated Mason and Dixon's line, which was run by those surveyors in 1764 on behalf of Lord Baltimore and William Penn. Its southern and western boundaries are perfectly straight lines. The southern line is one-half of the parallel 38° between the Atlantic Ocean and the Chesapeake Bay; the western boundary is a line drawn from the middle point of the parallel just described and runs a little west of north until it becomes tangent to the arc of a circle of twelve miles' radius, struck from the old courthouse at New Castle, as a center. The arc of this imaginary circle divides Delaware from Pennsylvania and extends over to low watermark on the New Jersey side of the Delaware River. The line follows the eastern shore of the river about twenty-four miles, or until it reaches a point twelve miles south of New Castle, the center of the circle. The remainder of the state's boundary is the middle of the Delaware River and Delaware Bay to the Atlantic Ocean.

FIG. 1. *On the Brandywine. This stream, famed for the beauty of its scenery, is closely connected with the early history of our country.*

Size. The state contains 2,370 square miles, of which 1,965 square miles are land, and 405 square miles water. Its length is ninety-five miles, and the greatest width is about thirty-five miles. Only one state in the Union, Rhode Island, is smaller than Delaware.

Surface. The Piedmont district, the hilly country between the mountains and the Atlantic Plain, occupies the extreme northern part of the state. If a line were drawn from a point on the western boundary about two miles south of Newark in a northeasterly direction, it would strike the city of Wilmington, and would mark the southern boundary of the hilly country. The district to the north of this line is rolling, and sometimes rises to a comparatively high elevation. Numerous small streams flow between the hills and find their way into the Christiana at Wilmington, just before it empties into the Delaware. The steep hillsides and narrow


DELAWARE
SCALE
0 1 2 3 4 5 11
11 Statute Miles to one inch
Capital ★ County Seats ◎
Other Cities ◦
NEW CASTLE
KENT
SUSSEX
SALEM
CUMBERLAND
NEW JERSEY
DELAWARE RIVER
DELAWARE BAY
Wilmington
Dover
Georgetown
Salem
Bridgeton
Millsboro
Milford
Harrington
Smyrna
Middletown
Newark
New Castle
Seaford
Laurel
Delmar
Lewes
Rehoboth Bay
Indian River Bay
Indian River Inlet
Cape Henlopen
Maurice River
Delaware River Pier
Fort Delaware
Delaware City
Penns Grove
Elmer
Vineland
Newfield
Riddleton
Quinton
Bombay Hook
Bay Side Sta. or Caviar P.O.
Manumuskin
Long Beach
Little Bombay Hook I.
Kelly I.
Little Creek
Woodside
Viola
Felton
Frederica
Masten
Camden
Rising Sun
Magnolia
Bowers
Leipsic
Chesw old
Kenton
Hartly
Barclay
Tempieville
Marydel
Henderson
Goldsboro
Sandtown
Greensboro Sta.
Whiteleys burg
Hickman
Williston
Concord
Smithville
Bridgeville
Cannon
Ellwood
Williamsburg
Harlock
Harrison
Reliance
Rhodesdale
Reeds Grove
Walnut Landing
Sharptown
Bethel
Riverton
Vienna
Mardela Springs
Blades
Seaford
Oak Grove
Federalsburg
Greenwood
Ellendale
Lincoln City
Farmington
Harbeson P.O.
Robbins
Redden
Sharps Hill
Georgetown
Woods Branch
Hollyville
Angola
Stockley
Trinity
Dagsboro
Frankford
Omar
Millville
Clarkesville
Ocean View
Roxana
Williamsville
Selbyville
Bunting
Bay Shore
Whitesville
Barren Cr.
Pepper
Broad Creek
Shoals Br.
Indian R.
Cedar I.
Middle X
Midway
Rehoboth
Cool Spring
Nassau
Overbert
Prime Hook
Milton
Broadkill R.
Mispillion
Cedar Cr.
Milford Cr.
Houston Sta.
Harrington
Hobbs
Denton
Hitchens
Watts
Choptank R.
Tuckahoe Cr.
Marshyhope Cr.
St. John's Br.
Gravelly Br.
Deep Cr.
Jones Cr.
Little Cr.
Tappers
Murder Kill
Leipsic R.
Bombay Hook R.
Blackbird Cr.
Blackbird Sta. or Forest P.O.
Taylors Bridge
Townsend
Warwick
Odessa
Port Penn
Summit Bridge
St. Georges
Kirkwood
Porters
Glasgow Sta. P.O.
Red Lion
Bear
Christiana
Ironhill
Childs
Elkton
Providence
Yorklyn
Hockessin
Mt. Cuba
Faulkland
Marshallton
Stanton
Greenville
Winterthur
Montchanin
Rockland
Centreville
Wilmington
Penns Grove
Oldmans Cr.
Salem Cr.
Alloway Jc.
Elmer
Riddleton
Quinton
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Alloway Jc.
Elmer
Riddleton
Quinton
Newfield
Vineland
Bridgeton
Cedarville
Manumuskin
Long Beach
Maurice River
Delaware River Pier
Fort Delaware
Delaware City
New Castle
State Road
Christiana
Farnhurst
Hillside
Oak
Bellevue
Edgemoor
Carrcroft
Talleyville
Rockland
Carpenter
Greenville
Winterthur
Montchanin
Centreville
Yorklyn
Hockessin
Mt. Cuba
Faulkland
Marshallton
Stanton
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Elmer
Riddleton
Quinton
Newfield
Vineland
Bridgeton
Cedarville
Manumuskin
Long Beach
Maurice River

unite at Wilmington and discharge into the Delaware. These streams rising among the hills flow rapidly and offer good water power for mills. Below the hilly country the Appoquinimink, the Smyrna, the St. Jones, the Mispillion, and Indian rivers are among those that empty into the Delaware Bay and the Atlantic Ocean. These rivers have generally very crooked courses, but furnish for some distance back from their mouths deep water for navigation and thus give excellent means for transportation and travel. On the Nanticoke River, which empties into the Chesapeake Bay, a line of boats runs between Seaford and the city of Baltimore.

In the southern part of the state, and extending into Maryland, is the great cypress swamp. It is covered with a variety of trees and plants. Beneath its surface, imbedded in the peat, are the remains of large trees which probably fell thousands of years ago. These trees are found by probing with long iron rods, and are brought to the surface and cut into shingles. This swamp is rapidly being drained and converted into farm land.

FIG. 3. *An old white oak tree. A fine representative of one of the most characteristic trees of the Delaware forests.*

Climate. That Delaware has a genial climate is proved by the green fields and fruitful orchards which cover her rolling hills and her great plain. Her summers, with an average temperature in August of 85 degrees F., are as warm as those of central France. (Adv. Geog., Fig. 84.) The average temperature for January is 25 degrees and the coldest day recorded for the state is 17 degrees below zero. The latest spring frost may not pass before the end of April, but from that time until the tenth of October the crops are practically safe from freezing.

Summer brings thunderstorms and heavy rains. These storms, however, seldom do great damage, even though, as sometimes happens, the average rainfall of a month may come in one day. As the region lies in the path of the westerlies the prevailing summer winds are from the northwest and those in winter from the southwest. (Adv. Geog., Figs. 82 and 84.) The cyclonic storms which whirl across the country from west to east (Adv. Geog., Fig. 187) have a marked influence on the climate. During the approach of a storm center, the wind comes from an easterly direction carrying a load of moisture from the ocean to drop upon the land. The rainfall is abundant and the distribution throughout the year is remarkably even (Adv. Geog., Fig. 188), though it is least during the late autumn and early winter. There is, therefore, little danger of a failure of the water supply or of parching droughts.

Vegetation. Chestnut, oak (Fig. 3), pine, tulip poplars, cypress, magnolia, dogwood, and walnut are found in the forests. The holly tree grows abundantly in the southern part of the state, and great shipments of it are made annually at Christmas time. The persimmon tree is common. The mistletoe, a parasitic growth, is found on the trees in many localities.

The flora of Delaware is extensive. The woods and creek sides are filled with wild flowers of every variety known to this latitude. In St. Jones River is a water lily of great size, which is inferior only to the Victoria Regia of the Amazon, and resembles the lotus flower of ancient Egypt.

Animal Life. Fish are very plentiful in the Delaware waters. Formerly the sturgeon fisheries were profitable. At Delaware City

sturgeon were caught and the "roe" put up as caviare, but in recent years sturgeon have become so scarce as to make the industry of little profit. Shad are among the most valuable fish, the catch in 1908 being worth $100,000. However, the menhaden industry is even more profitable. These fish, a species of herring, are bought chiefly for their oil and for use in the manufacturing of fertilizer. In 1908 the menhaden catch was valued at $285,000. Terrapin are found in the interior waters, and Delaware Bay and the rivers abound in oysters.

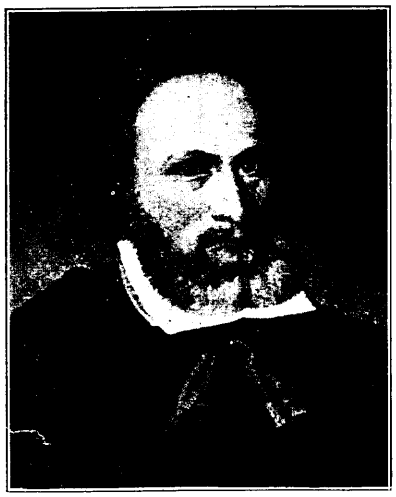

FIG. 4. *Lord De la Warr. From the portrait in the State Library, Richmond, Va., reproduced from the original painting now in possession of Earl De la Warr at Bourne, England.*

Settlement. The first settlement in Delaware was made by the Dutch at Lewes in 1631. The colony was destroyed by the Indians. The Swedes in 1638 landed on the site of the present city of Wilmington and planted the first successful colony in the state. Gustavus Adolphus planned this settlement and after his death at Lützen in the Thirty Years' War, and during the minority of Christina his daughter, Oxenstierna, the king's great Minister, carried out his plans with entire success. The Swedish settlement was conquered by the Dutch of New Amsterdam, now New York, in 1655, and finally in 1664 both New Amsterdam and New Sweden were taken by the English.

FIG. 5. *Cooch's Bridge. A historic landmark.*

History. In 1682 William Penn secured a grant of Pennsylvania from Charles II, later purchasing Delaware from the Duke of York, afterward James II, King of England, who at that time owned all that the Dutch had possessed in America. Delaware remained under the proprietary government of Pennsylvania until 1703, after which date it had a separate legislature, but the same governor as Pennsylvania. After the Revolution Delaware became a separate state. It is one of the thirteen original states and was the first to adopt the Federal Constitution.

Delaware takes its name from Lord De la Warr (Fig. 4), Governor of Virginia. On account of its small size it is called the "Diamond State," and its people affectionately crowd into that title much of the preciousness and rarity of the gem. The people of Delaware also delight in calling themselves the "Blue Hen's Chickens," because in the Revolutionary army the Delaware soldiers had as their mascot a pet hen of a blue color.

Historic Monuments. The rock on which the Swedes first landed is in Wilmington, lying just back of the

FIG. 6. *Cooch mansion. Here Lord Howe made his headquarters.*

McCullough iron works. The Colonial Dames have erected a monument on the spot.

At *Cooch's Bridge* (Fig. 5), September 3, 1777, before the battle of the Brandywine, a preliminary struggle took place, and here it is said the Stars and Stripes were first unfurled on land in battle. This spot is also marked by a suitable monument. Near by stands the Cooch mansion (Fig. 6) which Lord Howe made his headquarters.

Drawyer's Church. In 1708 the Presbytery of Philadelphia was petitioned by persons residing in the vicinity of Odessa for regular ministrations of the gospel there, and the Rev. John Wilson, of New Castle, was accordingly ordered to hold services in this neighborhood "once a month on a week day." On May 10, 1711, a site was chosen and the erection of a church was immediately begun. In 1769 the building was found unfit for purposes of worship, and money was raised for the erection of a new church—the historic old Drawyer's Church. The Presbyterians from all over the state visit this church annually on May 10, the anniversary of the purchase of the land.

Barratt's Chapel. In the latter part of the eighteenth century it was customary for people to meet at the house of some one in a neighborhood to listen to the discourse of a passing preacher. It often happened that more people assembled than could be accommodated with house room. In March, 1780, Barratt's Chapel was built for such meetings. It is one of the oldest Methodist churches in the state.

Christ Church, Broad Creek. This ancient church stands about two miles east of Laurel. It is built of the heart of pine and is without a particle of paint. With the exception of the roof, which has been renewed from time to time, this old building, both as to its exterior and interior, remains the same as it was more than a hundred years ago. It accommodates about six hundred people and, on the occasion of the annual visits of the Bishop, great crowds from all over the country

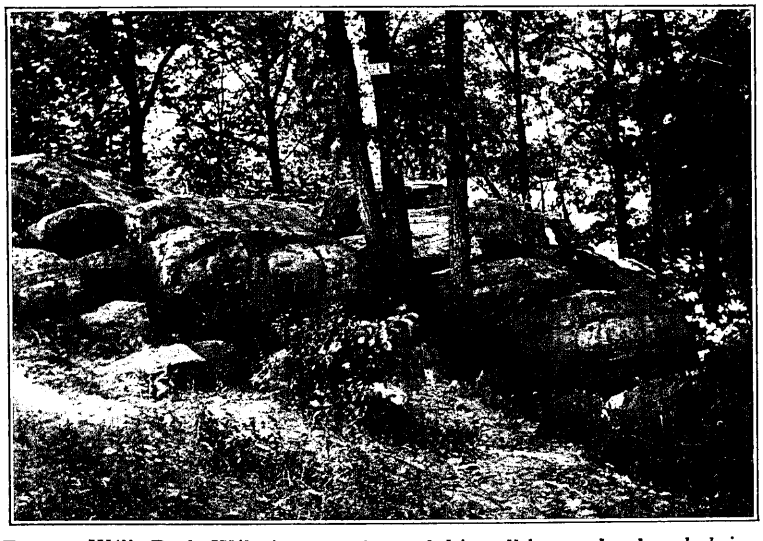

FIG. 7. *Wills Rock, Wilmington. Around this well-known landmark, lying on the banks of the Brandywine not far from the heart of the city, have been woven many interesting and romantic stories.*

FIG. 8. *Scene at a pea cannery. Notice the wagons loaded with vines.*

gather there to worship. It is one of the oldest Episcopal churches in the state.

Agriculture. The upper or hilly portion of the state contains rich lands which furnish good grazing for cattle. They also produce fine crops of wheat, corn, and potatoes. Farther south the soil is light and sandy. Indian corn grows abundantly, and sweet potatoes and melons of fine quality are produced. The cultivation of peas and tomatoes is carried on extensively in lower Delaware, furnishing employment to many people during the season in which the canneries are in operation. Especially interesting is the process by which the peas are prepared for canning. When they are ready to be canned the vines are cut off and taken to large machines by which the peas are hulled, thoroughly cleaned, separated into the several sizes, and then passed along to the canners. (Fig. 8.)

Delaware is largely devoted to the growing of fruit. The peach area, because of the ravages of the yellows, is now confined to the lower part of the state; apples and Keiffer pears, however, are grown in increasing quantities every year. Large quantities of Japanese plums (Fig. 9) are produced annually, and in the neighborhood of Smyrna there is a number of large vineyards. In springtime, especially, the orchards, with their wealth of pink and white blossoms, present a beautiful sight. Strawberries are raised in enormous quantities south of Middletown. (Figs. 10 and 11.) Raspberries and blackberries are cultivated extensively throughout the state.

Mineral Resources. Clay products are the most valuable mineral resource of the state. Immense beds of kaolin, the fine clay from which porcelain is made, lie in the upper part of New Castle County. Next to clays in importance are stones. One of Delaware's most useful stones, feldspar, is related to kaolin; in fact, kaolin is formed from feldspar by a long process of natural decay. Feldspar, as well as kaolin, plays an important part in the making of dishes. There are several mills in the northern part of the state where this stone is ground to a powder. From

FIG. 9. *A plum orchard in full bloom.*

the mills the powdered feldspar is sent to the potteries. There it is used in glazing dish ware. Granite, however, is the most valuable stone. It is found in great deposits along the Brandywine. Serpentine, also a handsome stone used for architectural and decorative purposes, occurs among the hills. Serpentine is usually green in color, and mottled like a snake's skin. Mines of iron ore were formerly worked at Iron Hill and bog iron is found in various parts of the state.

Manufacturing. Delaware has natural advantages for manufacturing, though she is not 'preëminently a manufacturing state. The small, swift streams rising in the hills of the Piedmont region furnish water power for numerous mills in the northern part of the state. For many years the falls at the mouth of the Brandywine have furnished power to turn the wheels of factories. As long ago as 1814 there were sixteen cooper shops, fourteen grist mills, five cotton mills, three woolen mills, powder mills, saw mills and other shops on the river near Wilmington. The near-by coal fields of Pennsylvania also furnish a source of power. As for shipping, Delaware River and Delaware Bay offer facilities for cheap water transportation.

FIG. 10. *A strawberry field in Sussex County. In 1900 this county produced two-thirds of the entire strawberry crop of the state.*

The manufacture of leather, especially of fine morocco, made from goat skins, leads in importance. In the year 1905 it comprised 24.9 per cent of the manufactures of the state. It is carried on chiefly at Wilmington. The making of railway cars is second in importance. This industry, too, is located at Wilmington. Foundries and machine shops, paper and pulp mills, iron and steel works, follow in importance. There are also ship-building yards and flouring and grist mills. Since the canning of Delaware's many fruits and vegetables has become a thriving industry, canning factories are multiplying in number.

The value of the manufactured products of the state in 1905 amounted to more than $40,000,000. Of these, manufactures exceeding in amount $30,000,000 were turned out at Wilmington, where a large proportion of the factories of the state are located. Since 1900, however, factories in increasing numbers have been springing up in many of the smaller towns.

Transportation. One of the earliest railroad lines built in the United States was the New Castle & Frenchtown Railroad joining the Delaware River with Chesapeake Bay. This road is now abandoned excepting a few miles which form a part of the direct line of the Delaware road.

The Philadelphia, Baltimore & Washington Railroad, a part of the Pennsylvania system, enters the state at the northeast boundary, and passes through it in a southwesterly direction. The Delaware road with its branches forms a part of the Philadelphia, Baltimore & Washington and is therefore under the management of the Pennsylvania Railroad. The line extends from Wilmington

southward through the state. The Delaware, Maryland & Virginia branch leaves the main line at Harrington and passes through Milford and Georgetown down into Maryland. A branch leaves this road at Georgetown and goes to Lewes and Rehoboth. At Townsend, Clayton, and Seaford, branches leave the main line of the Philadelphia, Baltimore & Washington for various towns on the Eastern Shore of Maryland.

The Philadelphia division of the Baltimore & Ohio crosses the northern part of the state in a southwesterly direction, the line passing through the northern part of Wilmington. The Wilmington & Northern road is merged in the Philadelphia & Reading. The Maryland, Delaware & Virginia, formerly Queen Anne's Railroad, connects Love Point, Maryland, with Lewes. There are about 350 miles of railroad in the state.

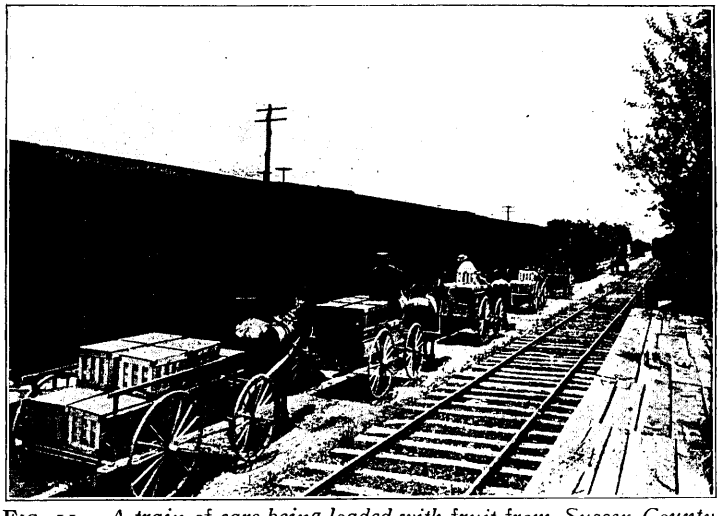

FIG. 11. *A train of cars being loaded with fruit from Sussex County. Note the crates filled with strawberries ready for the city markets.*

Trolley lines are rapidly building up especially around Wilmington and the surrounding villages, and communication has been established with Philadelphia.

The Chesapeake & Delaware Canal extends from Delaware City to Chesapeake City and furnishes communication by water between Baltimore and Philadelphia. Summit Bridge, which crosses this canal at an elevation of about seventy feet, presents a striking view.

Government. The chief executive officers are the Governor, who must be at least thirty years old; a Lieutenant-governor, Attorney-general, Treasurer, Auditor, and Commissioner of Insurance all elected for four years. The Governor appoints a Secretary of State, and has the veto power. The Lieutenant-governor is the President of the Senate.

The Legislature. The House of Representatives consists of thirty-five members, elected by districts for two years. There are fifteen Representatives from New Castle County, five of whom come from the city of Wilmington. There are ten each from Kent and Sussex counties. The Senate consists of seventeen members, elected by districts for four years. Seven members are from New Castle County, two of whom come from Wilmington. There are five Senators from both Kent and Sussex.

The Judiciary. The judges of the state consist of a Chancellor, a Chief Justice, and four Associate Justices. They are appointed by the Governor for a period of twelve years. Two of the five law judges must be of a different political party from the other three.

Courts. There are in the Judicial Department a Supreme Court, a Superior Court, a Chancery Court, an Orphan's Court, a Register's Court, a Court of Oyer and Terminer, a Court of General Sessions, and other courts of minor importance. The business of each county is in the hands of a Levy Court. The county officers are elected by the people.

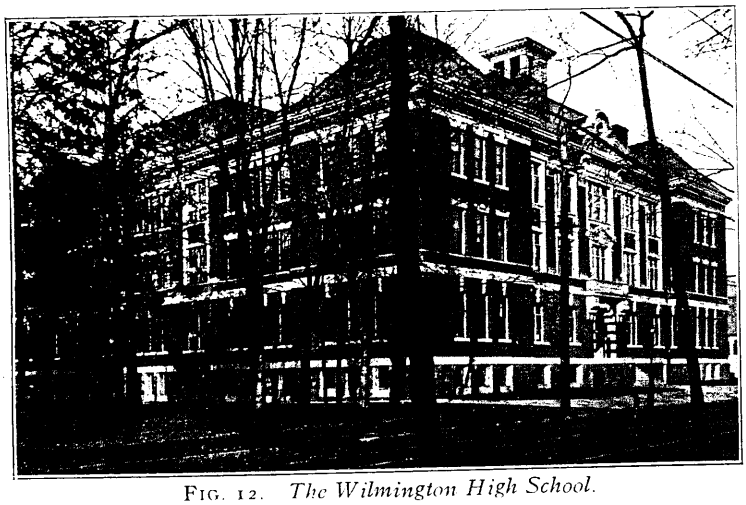

FIG. 12. *The Wilmington High School.*

Political Divisions. The state is divided into three counties—New Castle, Kent, and Sussex:

COUNTIES	LAND AREA SQUARE MILES	POPULATION 1910
New Castle	430	123,188
Kent	630	32,721
Sussex	900	46,413

Formerly the counties were divided into hundreds for election purposes, but under the Constitution which was adopted in 1897 the division of the counties into election districts was made, and as the boundaries no longer coincide in all cases with the boundaries of the hundreds, the latter will gradually lose their English designation. New Castle formerly was the county seat of New Castle County, but in 1880 the courthouse was built in Wilmington, and in 1901 the old jail was abandoned and the new workhouse near Elsmere Junction has since been used for county prisoners. All the county officers now have offices in the new courthouse at Wilmington. Dover is the county seat of Kent County, and Georgetown of Sussex County.

Education. Before the first quarter of the nineteenth century public education received but little attention. Of course there were good private schools in various parts of the state for such as were able and willing to pay for the instruction. William Cobbett, the celebrated English Liberal, taught in Wilmington in 1792, and there were some celebrated schoolmasters at Dover and also at Newark in the early part of the century. The public school system was established about the year 1829, and a school fund was gradually collected by setting aside certain fees and taxes. This fund was greatly augmented near the close of Jackson's administration by the distribution of the surplus in the treasury of the United States among the several states of the Union.

Since 1875 the public schools of the state have been placed upon a solid financial basis and have taken a strong hold upon the affections of the people. A new school law, which was formed principally by codifying the old laws and eliminating the contradictions and inconsistencies that had grown up in them, was adopted in 1898. The

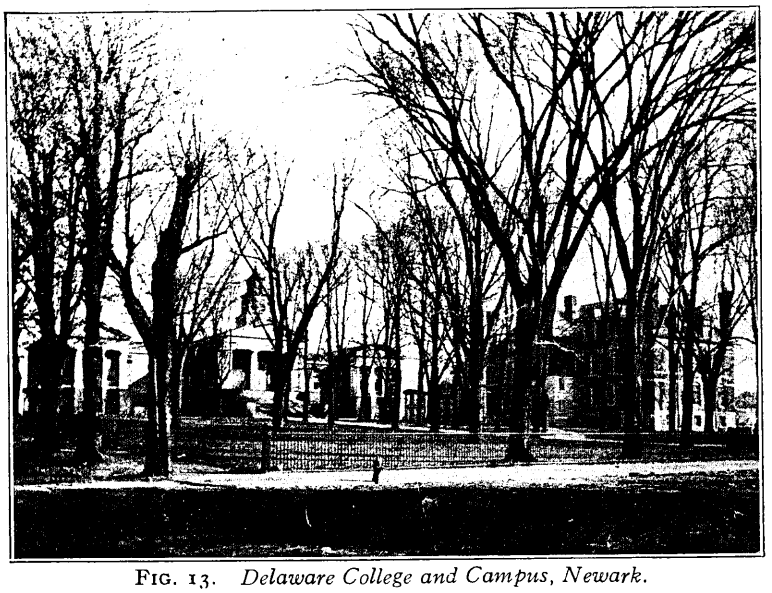

FIG. 13. *Delaware College and Campus, Newark.*

State Board of Education is now made up of the Governor, the Secretary of State, the State Auditor, the President of Delaware College, and the senior member of each county school commission. The county school commission consists of three members appointed by the Governor, one of whom must differ from the others in his political relations. There is a superintendent for each county appointed by the Governor.

FIG. 14. *Wilmington Conference Academy, Dover.*

The Wilmington High School. The Wilmington High School occupies a commodious building, which is a splendid piece of architecture and contains all the modern devices which make the work of instruction a pleasure to teacher and pupil. (Fig 12.)

Friends' School. Friends' School in Wilmington, a private institution of a very high grade, occupies a fine building on Fourth and West streets.

The Wilmington Conference Academy. The Wilmington Conference Academy, situated at Dover, enjoys the patronage of a large number of boys and girls from the Delaware and Maryland peninsula. It is managed by a Board of Trustees appointed by the Wilmington Conference of the Methodist Episcopal Church. (Fig. 14.)

Delaware College. Delaware College, at Newark, received its charter in 1833 and first opened its doors for the reception of students in 1834. The college continued to do good work until obliged, by reason of the feeling of uneasiness at the approach of the war between the states, to close its doors in 1859. Meanwhile having been designated by the state as beneficiary of the money arising from the appropriation of public lands by the general government, in 1870 it was again opened to students. From that time it has grown steadily. The institution has since been made the beneficiary of several grants from the general government, and has received some handsome donations from the state for buildings. (Fig. 13.)

The State College for Colored Students. The College for Colored Students at Dover receives one-fifth of the funds arising from what is known as the "New Morrill Bill." This fund amounts to $5,000 a year. The state has made a number of appropriations for new buildings. The college is doing a good work for the race.

Population. According to the census of 1910, the population of the state was 202,322, of which negroes constituted about one-fifth. In the upper part of the state the white population is made up of representatives of many European nationalities. Ireland sends the greatest number of foreign born. The lower part contains the purest Anglo-Saxon population to be found in the country. It is often remarked that a reading of jury lists in Sussex County sounds much the same as similar lists would if heard read in England.

II. THE GROWTH AND DEVELOPMENT OF CITIES AND TOWNS

New Castle County. *Wilmington*, the largest city in the state, had a population of 87,411, according to the census of 1910. It is situated between the Brandywine and Christiana rivers just above their junction, where they unite to flow into the Delaware. The northern part of the city along the Brandywine is very hilly, while to the south along the Christiana the land is low and marshy. Some of the streets in the northern and western part of the city are remarkable for their natural beauty and the tasteful and home-like appearance of their houses. The streets are well paved and the drainage is good. The high banks of the Brandywine, covered with native trees, constitute a magnificent park system, and the winding footpath along the stream, with the steep banks on each side, give it an indescribable charm of quiet beauty. (Fig. 15.) Wilmington has an excellent system of public schools which is entirely independent of the State Board of Education. The city Board of Education, which is elected by the people, appoints the city superintendent of schools, and all of the teachers.

The county courthouse, in which all the officials have offices, is a large building of imposing appearance. The new post-office building is a conspicuous example of good architecture. The high-school building is the pride of the city. (Fig. 12.) Wilmington has many beautiful churches. Old Swedes' Church in the lower part of the city has been renovated and repaired, and is a splendid example of early architecture. (Fig. 16.)

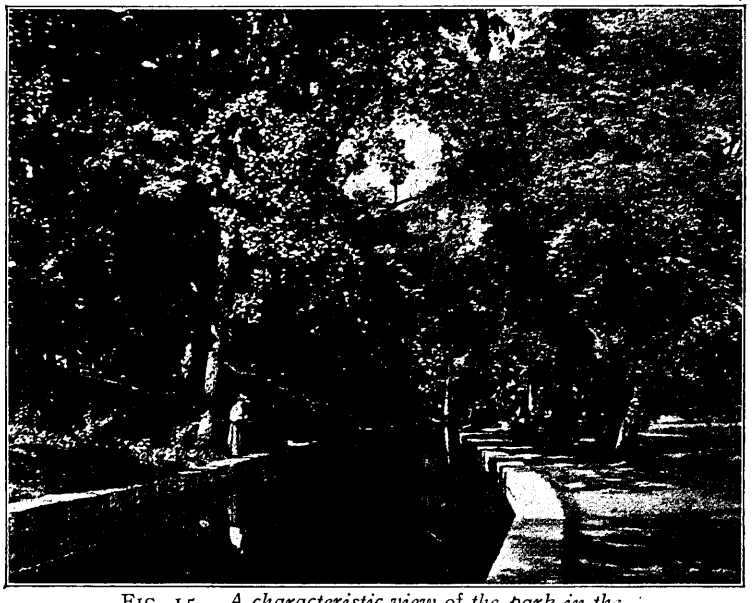

FIG. 15. *A characteristic view of the park in the upper part of Wilmington.*

Wilmington is eminently a manufacturing city, and gives constant employment to a great number of skilled artisans in its various works.

It is a great center for the manufacture of morocco, and thousands of skins are annually sent out as finely finished leather. There are several large manufacturing firms which build ships and railroad cars, and make all kinds of furnishings for buildings. There are also several large shops which are exclusively engaged in turning out machinery. There is a fine plant for the making of steel by the open-hearth process.

The great powder-making establishment of the Duponts is about two miles from Wilmington on the Brandywine. There is a large cotton mill near by where goods for window shades and other purposes are manufactured. In the country districts there are also several large woolen mills, all of which depend upon the fine water power of the streams. A great bridge-making concern has also established its works just outside of Wilmington.

New Castle (3,351) is situated about five miles south of Wilmington on the Delaware River. It is an old town and contains many houses of historic interest. It was formerly the county seat of New Castle County. The old courthouse and the old jail are still conspicuous buildings. New Castle's streets are well paved and the town in its appearance is prosperous and thrifty. Just south of the city there are large iron tube works which give employment to a great many men. There is also a large flour mill here.

Middletown (1,399) is surrounded by one of the best agricultural districts that can be found anywhere in the Eastern states. It is a thriving town,

doing a large business with the farmers around. Some manufacturing is done here, but its greatest wealth comes from the richness of the soil. It is a town of fine homes; many of its citizens are retired farmers.

Newarк (1,913) is pleasantly situated among the hills in the northern part of the state. It is the seat of Delaware College and of the old Newark Academy, an institution that was once an important educational factor in the history of the state, but has since been turned over to the public school authorities. Newark has paper mills, wall paper printing works, and a vulcanized fiber factory. It is situated on the lines of both the Philadelphia, Baltimore & Washington and the Baltimore & Ohio railroads, and has fine train service to the cities of the East. It is a well-ordered town and the people are noted for their social graces and high intelligence.

Delaware City (1,132) is a quiet town very pleasantly situated on the Delaware River, where the Chesapeake & Delaware Canal begins. A flourishing local trade is carried on by the citizens. Many of its people are engaged in the fisheries, which are a source of much wealth.

Newport (722) is a busy town in the suburbs of the city of Wilmington.

Odessa (585) is situated in the midst of that rich tract of agricultural land which makes

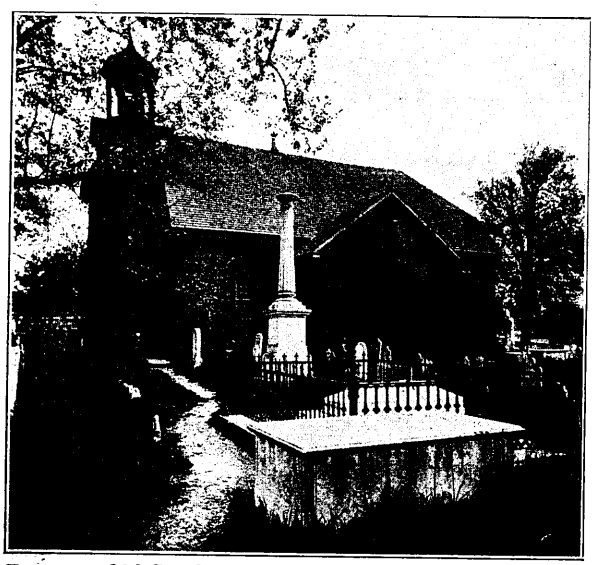

FIG. 16. *Old Swedes' Church—originally Holy Trinity—built, 1698. It is the oldest church building in the United States in continuous occupation.*

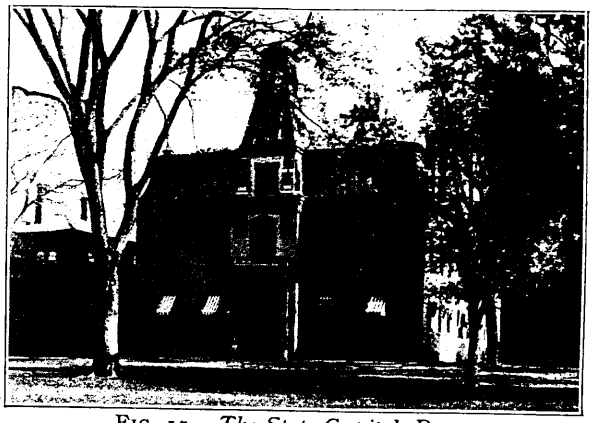

FIG. 17. *The State Capitol, Dover.*

Middletown so well known. It lies directly east of Middletown. The Appoquinimink River, which is navigable, furnishes a means of transportation to Philadelphia by way of the Delaware River into which it empties.

Townsend (494) is a flourishing village in the southern part of the county, and is the junction of one of the lateral branches of the Delaware Railroad. By this system of branch roads the Eastern Shore of Maryland is put in communication with Baltimore and Philadelphia.

St. Georges (264) is situated on the Chesapeake & Delaware Canal, and is in the middle of a rich farming community.

Port Penn (299) is on the Delaware River, and is the headquarters of a great many fishermen.

Kent County. *Dover* (3,720), the capital of the state and the county seat of Kent County, is a very pretty town on the St. Jones or Dover River. A large open square, called the "Green," lends charm to this city. The various state buildings (Fig. 17) and county buildings front on the "Green," and many of the older houses of Dover are built along this grass-covered plot. The mild climate of Dover and the beauty of the town commend it to northern visitors who seek to escape the rigors of winter. It is a busy place with large canneries of meats and poultry, and also has machine shops, wood furnishing shops, and silk mills. The Wilmington Conference Academy is situated here. (Fig. 14.)

Milford (2,603) is situated partly in Kent and partly in Sussex counties, which are separated by the Mispillion River. Milford is in the midst of a great fruit-growing country, and in the ship-

ping season it presents a busy scene. Its streets are well paved and it has the air of great thrift. Its markets abound in fish, oysters, and game.

Smyrna (1,843) lies in the northern part of Kent County near the Smyrna River, which is navigable to this point. About one mile from the Delaware Railroad, it is reached by changing cars at Clayton and taking a train on a branch road. It is prosperous and is well supplied with agricultural products by the fertile farms around it. Smyrna is the seat of manufactures.

Harrington (1,500) is a busy town at the junction of the Delaware, Maryland & Virginia Branch of the Delaware Railroad. It is well built and is the center of a rich farming country.

Clayton (764) is a railroad center; branch roads lead off to Smyrna and to the Eastern Shore of Maryland. Its population is made up of people who are in very comfortable circumstances.

Frederica (659), a prosperous town situated near the Murderkill, has a good local trade.

Camden (553), *Felton* (451), and *Wyoming* (517) are all thriving little villages. Apples, peaches, strawberries, and raspberries are cultivated extensively in their neighborhood.

Sussex County. *Georgetown* (1,609) is the county seat of Sussex County and contains many fine old buildings. There are some factories here, and the business done with the country around is extensive. In the center of the town is an open square called the "Green" on which the courthouse stands, and around it are built many of the finest houses in Georgetown. The "Green" is on the watershed between the Chesapeake and the Delaware bays; water on the east side flows toward the Delaware Bay, and on the west side toward the Chesapeake.

Lewes (2,158) is situated in the eastern part of the county just at the mouth of Delaware Bay. The Delaware Breakwater is built just off the coast from Lewes and affords shelter during storms to many boats. Many of the citizens of Lewes are pilots who are employed in guiding boats up the Delaware. Pleasant summer homes are found here and also at *Rehoboth* (327), a summer resort about six miles down the shore. Here is a large factory for extracting oil from fish. Fish and oysters are abundant.

Laurel (2,166) is on the Broad River, a tributary of the Nanticoke, and has steamboat connection with Baltimore. It ships vast quantities of strawberries, peaches, and melons annually and has a large lumber trade. Sweet potatoes of excellent quality are also raised in great abundance in the neighborhood. Here are a number of factories engaged in making baskets and crates for handling the fruit. Laurel is one of the wealthiest towns of the state.

Seaford (2,108) lies about six miles north of Laurel and is also on the Delaware Railroad. It is on the Nanticoke River and has steamboat communication with Baltimore. It is in the midst of a great fruit country, and presents a busy sight in the height of the shipping season. Immense quantities of oysters are handled here; several large packing houses are engaged in the industry of packing and shipping them.

Milton (1,038) is a flourishing town situated near the Broadkiln River and on the Maryland, Delaware & Virginia Railway. It has a rich country around it from which to attract trade.

Bridgeville (939) is noted as being the point from which some of the largest shipments of strawberries in the United States have been made. It is the center of the great berry and peach-growing area of Sussex County. It is a thriving town and is surrounded by a neighborhood of well-to-do farmers and fruit growers.

Bethel (370) is a village which has a boat-building establishment.

Delmar (530), *Frankford* (395), and *Selbyville* (342) are thriving villages.

AIDS FOR TEACHERS

SUGGESTIVE QUESTIONS TO ACCOMPANY THE GEOGRAPHY OF DELAWARE

Location and Size. (1) To what group of states does Delaware belong? What state, however, does it most resemble? (2) What is Mason and Dixon's line? (3) Describe and draw the northern boundary line of Delaware. (4) What is the greatest length of Delaware? The greatest width? (5) How does Delaware rank as to size with other states of the Union?

Surface and Drainage. (1) Distinguish between the two divisions of the surface of Delaware? (2) Locate on map the watershed between Delaware and Chesapeake Bay. (3) What rivers drain the Piedmont district? The Coastal Plain? (4) Describe the rivers of both sections. (5) Locate and describe the great cypress swamp.

Climate. (1) What are the results of a genial climate? (2) On the map (Adv. Geog., Fig. 76) locate Delaware and France, comparing latitudes. What causes the mildness of climate in France? (3) From what direction are the prevailing summer winds of Delaware? (4) Locate Delaware on the map (Adv. Geog., Fig. 188). What is the amount of rainfall for the state?

Vegetation. (1) Distinguish the native forest trees of the state, sketching leaf form of each.

Animal Life. (1) Describe a sturgeon. What is the "roe?" (2) At present what varieties of fish yield most profit to Delaware fishermen?

Settlement and History. (1) Locate the first settlement in Delaware; the first successful colony. (2) State briefly the history of the Swedish settlement. (3) Describe the early government of Delaware. (4) Name the thirteen original states. (5) From what did the state take its name? (6) State reasons for the erection of two historic monuments in Delaware. (7) Describe and locate Drawyer's church; Barratt's Chapel; Christ Church, Broad Creek.

Agriculture (1) What industries and products mark the upper or hilly portion of the state? The southern portion? (2) What fruits are grown in large quantities?

Mineral Resources. (1) What is the most valuable mineral resource of Delaware? (2) What is kaolin? Feldspar? Granite? Serpentine? Iron ore? Bog iron?

Manufacturing. (1) What three natural advantages for manufacturing has Delaware? (2) Describe the leading manufacturing industry? (3) Name other important manufacturing industries. (4) What per cent of the total value of manufactured products belongs to Wilmington?

Transportation. (1) Locate one of the earliest railroads, showing points connected. (2) Describe Delaware's three systems of transportation.

Government. (1) Name the chief executive officers of the state. Who is the present Governor? (2) Describe the two branches of the Legislature? In which district do you belong? (3) What offices and courts constitute the judiciary? (4) What is the Levy Court?

Political Divisions. (1) Name and locate the three counties of Delaware; the county seats. (2) Explain the term "hundreds."

Education. (1) In the early days of Delaware how was education promoted? (2) How long has the public school system been established? How long has the new school law been in force? (3) Describe the state board of education; the county school commission. (4) Name and locate the leading educational institutions of the state.

Population. (1) Contrast the population of the upper and lower portions of the state as to nationalities. (2) In what country are the family names similar to those of Delaware? (3) What is a jury list?

Cities. (1) Name and locate ten important cities in Newcastle County. (2) Describe Wilmington as to location, natural features, buildings, educational facilities, and industries. (3) Name two important industries of New Castle. (4) What is the cause of Middletown's wealth? What natural advantage distinguishes Odessa? (5) What cities in the state are important as railroad junctions? (6) Name and locate nine important cities in Kent County. (7) Describe the capital city of Delaware. (8) Of what industry is Milford the center? What other towns of the state are situated in a fruit-growing area? (9) What advantages of location does Smyrna possess? (10) Locate ten important cities of Sussex County on your own state map. (11) Describe Lewes as to position and industries. (12) From what are baskets and crates for shipping fruit made? (13) Describe the "Green" in Georgetown. (14) For what is Seaford noted? Bethel? (15) Arrange the cities of Delaware according to population.