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THE HISTORY OF PAPER MAKING IN WASHTENAW COUNTY

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The use of paper may well be considered a measure of the culture and the business activity of the people making up a community or a nation. Since the beginning of modern civilization paper has been a fundamental necessity to culture and business. It was a prime necessity in the early life of the American colonists but, like numerous other commodities produced in the Mother Country, its manufacture was restricted largely to the home country and therefore, even though a necessity, it was a luxury to be used by the few who could afford it.

In 1690 the first paper mill was licensed to operate at Germantown, then just outside of Philadelphia. This mill, a part of which still stands, produced a few pounds of hand-made paper a day, using the most primitive methods of reducing rags to pulp and fixing the fibres in the pulp in sheet form in a hand mold. Not until the outbreak of the Revolution was there a serious need of paper in the Colonies, for the limited purposes to which it was put, and this need brought very interesting appeals from the local Colonial governments and from the Continental Army to save rags from which paper might be made.

Very slowly small mills were built in Massachusetts and New York and the paper needs of the new country were met in a way. For more than a hundred years after the first mill was built at Germantown, the growth of the industry was exceedingly slow. Processes were simple, almost primitive, mills were isolated, and there was but one raw material and that was cotton and linen rags.

The financing of a paper mill in Colonial days was a very simple matter as plant and machinery cost a few hundred dollars, as compared with modern mills costing hundreds of thousands or millions of dollars. As with most of the early industries, the paper mills were largely family affairs, seldom employing more than a few men or boys outside of the family of the owner.

With all the primitiveness of the early paper mills, and with these mills turning out pounds where today tons are produced, the paper was usually of very high grade, comparing favorably with the

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best grades of the rag content papers produced today. One has but to see some of the books printed in early colonial days to appreciate the fact that the art of paper-making was in a way as well understood in 1727 as in 1944.

The growth of the pulp and paper industry in the United States from 1765 to 1865 was slow but steady. With the exception of the introduction, in 1798, of the Fourdrinier (moving wire) upon which the sheet of paper was formed, thereby greatly speeding production, there was very little improvement in machinery in the paper mill between 1765 and 1865. Cotton and linen rags continued to be the principal raw material. Rags were collected much as they are today, taken to the mill, cleaned, and made into pulp by cooking and bleaching, and then through the use of quantities of clean water the fibres of the pulp were carried onto the wire and formed into a sheet. The paper as it came from the wire was cut into sheets and hung up in lofts to dry. There was much skill used in the formation of the sheet and naturally much hand labor entered into the handling of the paper, from the rags as they were carefully sorted and cleaned to the paper as it was taken from the drying loft to be bundled and shipped.

During the century before the **Civil War** the increase in population of the United States was slow and industry generally was simple in character. Paper, depending entirely upon rags as a raw material, was relatively expensive and its use was confined to a comparatively few newspapers, small in size, to books and pamphlets, personal correspondence, wall decoration, etc. Printing presses had not been modernized and typewriters were still in the brain or the hand of the inventor.

With the industrial development which began following the Civil War, there was a growing demand for cheaper paper which could be more widely used. The pulp and paper manufacturer was ever on the outlook for new processes which would make it possible for him to meet the demand for more paper. In the late '60's, certain manufacturers, some of whom are still active in the industry, learned that a process for the reduction of wood to pulp and the use of pulp in the manufacture of paper had been perfected in Europe. Some of these men went to Europe and brought back with them licenses for foreign patents under which they could produce pulp from wood. The first wood pulp produced in this country under these foreign patents was crude indeed and for some time there was doubt if wood pulp could be used in producing the better grades of paper. Gradually methods of bleaching the pulp were perfected, and through the 1870's and 1880's wood pulp and paper made from wood pulp were produced in increasing quantities.

In considering the development of the pulp and paper industry of the United States it is interesting and significant to note that the paper industry is the only great industry which has changed its raw material in large part within a human generation. Rags are still used in large quantities for the production of the better

grades of paper for use where durability and permanence are essential, but more than 90% of the fifteen million odd tons of paper produced in this country in 1943 was made from wood pulp.

The demonstration of the fact that paper could be made from an abundant and cheap raw material, the supply of which in the years preceding 1900 seemed absolutely inexhaustible in this country, brought home to the minds of the consuming public the idea that it was possible to use a cheaper grade of paper in increasing quantities for printing and other uses. It is not too much to say that the modern printing press, now turning out the great metropolitan newspapers and books by the hundreds of thousands, resulted from the successful demonstration that paper could be made cheaply from wood.

It would be interesting to trace the effect of the production of cheap paper from wood upon the widespread education of the people of this country and resulting "reading public." There are, of course, other factors such as better communication entering into the picture. However, in the days before the Civil War daily newspapers of limited size printed on paper made from rags were few and far between and were read by a small part of the public only. Today it is trite to say that everyone reads the newspapers, the popular magazines, and books upon every subject.

Though experiments were conducted earlier it was not until about 1874 that the first chemical treatment was applied to wood to separate the individual fibres so that they could be used for making paper on a commercial basis.

The use of wood for the manufacture of paper brought the paper industry into a new period of development. The demand for cheaper wood papers caused the manufacturer to work strenuously for increased production by improving the machinery in the mills and the efficiency of his labor, and as he increased the output of his mill he stimulated the market by finding new outlets for his product. Today we are in the age of paper, when its use for printing and correspondence is almost secondary to its use in construction as containers for shipments of all sorts of commodities, in the manufacture of other commodities, and as an important necessity in the daily lives of the entire people.

The demand for paper has increased so tremendously that it would be utterly impossible to fill it without wood. It is estimated that an acre of woodland will produce about five times as much cellulose each year as an acre of cotton.

The period of rapid growth of the industry, from 1865 to 1925, brought the segregation of mills in certain districts where there was available water for power and process and where raw materials were easily accessible. So we had a great group of mills in Massachusetts manufacturing the bulk of fine paper produced in the U. S. Another segregation of mills came in northern New York and again in northern New England, where for many years the better grades of book

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paper and the coarser papers, such as newsprint and wrapping, have been produced in large quantities. Westward we had such paper mill districts as those of Michigan, Ohio, and Wisconsin. More recently there has come the rapid development of mills in the South and the Northwest.

River valleys presented the logical organization, for to a great extent they follow the chronological order of the mills. The first mill in Michigan being in the River Raisin Valley, that was the first developmental area in the state; the second mill being in the Huron River Valley, this was the second developmental area. The products of each valley are usually similar for the success of one business venture attracts others of the same kind to locate there. Also, the capital for investment of each valley is usually free from outside aid and usually concentrated in the valley.

Thus there were five major divisions in this Michigan history:

1. River Raisin Valley includes Monroe, Dundee, Manchester, Adrian, and Tecumseh.
2. Huron River Valley includes Ann Arbor, Ypsilanti, and the intervening and surrounding small towns.
3. St. Joseph River Valley includes Three Rivers, Niles, and St. Joseph.
4. Kalamazoo River Valley includes Kalamazoo, Plainwell, Otsego, Allegan and Vicksburg, and Watervliet which, although not on the Kalamazoo River, had mills started as off-shoots of Kalamazoo mills by Kalamazoo men.
5. Minor areas and individual mills include Upper Peninsular, Northern Michigan, the Detroit area, and various scattered mills.

The first paper mill in Michigan was located in the River Raisin Valley at a small town called Raisinville, about 3 or 4 miles west of Monroe. There a man by the name of Christopher McDowell had erected a small shack containing a crude machine approximately 30 ft. long and 38 inches wide, on which the paper was dried by passing it around a drum 10 feet in diameter containing a wood fire. This mill was called the River Raisin Paper Company, but it was not connected with the present company of that name. The man who owned the mill lived on the opposite side of the river on a farm which is now owned by the president of the existent River Raisin Paper Company.

The McDowell mill manufactured, at first, a butcher's wrapping paper made from straw. This product was taken around in carts and sold to the merchants of the village stores. Shortly after its inception the mill branched out and began to manufacture other kinds of paper. Later companies were organized and other mills built in this locality.

The second developmental area, chronologically, in the Michigan paper and pulp industry was in the Ann Arbor - Ypsilanti area. Here probably was located the second mill in Michigan. There is no conclusive data to prove this but it is known that there was constructed in Washtenaw County a paper mill some time between 1840 and 1850,

and in a Detroit paper published in 1842 we find a reference to one paper mill in Washtenaw County in addition to several saw and grist mills there.

The next mill of which there is a record was one in which Volney Chapin purchased half-interest in the year 1851. This was the J. H. Lund mill at Ann Arbor. This mill later burned. In 1854 this same Volney Chapin helped build the Geddes mill called the Lund, Chapin & Company. In 1865 Lund sold out and it was merely Chapin & Company. This mill was eventually sold and the business discontinued.

The first mill in Ypsilanti was the Cornwell & Company's Paper Company, which was organized in 1855 or 1856. At that time Cornelius Cornwell bought the land where the lower paper mill stood, and with it one half the water power. Mrs. Larzelere put in the west side water power for a certain amount of stock in the paper mill. Mr. Van Cleve put in \$1,000, and thus the first paper factory was established. This can properly be called the beginning of paper making as an industry in Washtenaw County, because this marked the first enterprise on a large scale. All previous mills were merely small concerns making wrapping paper which they sold to local merchants, but this mill, utilizing both water and steam power, manufactured newsprint. In 1863, Van Cleve and Mrs. Larzelere sold out to Cornwell. In 1871 the mill was partially destroyed by fire and they suffered from another a little later, but the enterprise pushed onward.

In 1874 Cornelius Cornwell, his son Clark, and Brothers erected a paper mill $1\frac{1}{2}$ miles above the Peninsular mills, and in that day it was acclaimed the most extensive paper mill in the state. The water power at this point was considered the best on the Huron with a head of 17 feet. This power is still in existence and owned by the Detroit Edison Company, known as their Superior Plant. Water power head is still 17 feet.

From a member of the Cornwell family, Mr. Edward Cornwell, for many years associated with the Peninsular Paper Company, I am able to ascertain the names and locations of their various plants, but no dates:-

1. Mill at Foster's, manufacturing wrapping paper and later destroyed by fire.
2. Mill at Hudson above Dexter, manufacturing groundwood pulp, which also burned.
3. Mill just below Barton Dam, manufacturing groundwood pulp and later dismantled.
4. Mill at Superior, the site of the Detroit Edison Company's Superior Plant. This was destroyed by fire in 1906.
5. Mill manufacturing paper southeast of Ypsilanti on the outskirts of the city where the present Ford Plant is located. This mill was partially destroyed by fire in 1871, rebuilt, and finally dismantled in 1886.
6. Mill at Jackson located just north of the prison, manufacturing soda pulp. This was destroyed by fire,

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From the above you will gather the importance of the Cornwell Company's interest. The Cornwell family was the pioneer family of paper makers in Michigan.

The one and only existing paper mill in Washtenaw County at this time is the Peninsular Paper Company at Ypsilanti. This company was incorporated in 1867 with a capital stock of \$50,000.00. The original incorporators were: John W. Van Cleve, Wm. H. Myers, Samuel Barnard. The original stockholders were: Samuel Barnard, Lambert A. Barnes, Wm. H. Myers, and Daniel L. Quirk. The first Board of Directors elected May, 1868, consisted of: Samuel Barnard, Lambert A. Barnes, Isaac N. Conklin, William H. Myers, and John W. Van Cleve.

The construction of the mill was begun in the spring of 1867 for one paper machine, and the first paper was made in 1868.

An important factor in the decision to build the mill at this time was the fortunate circumstance of obtaining a contract from the Chicago Tribune to take the output of the mill in newsprint. At that time newsprint was made from rags, and it is interesting to note that the price on this contract was 17¢ per pound.

After the mill was built and operating, the Chicago Tribune insisted that the Peninsular Paper Company build another mill, far enough removed from the original mill to safeguard the newspaper's supply in case of fire. May 8, 1876, therefore, the capitalization was increased from \$50,000.00 to \$100,000.00 and another one-machine mill was erected on the north side of the Huron River. This was operated until September 28, 1898, when it was destroyed by fire. All salvaged machinery was then removed to the original building which was enlarged to accommodate two paper machines and the additional equipment for increased output.

By this time, 1898, wood pulp and groundwood were being used extensively in the manufacture of lower priced papers, particularly newsprint, which had greatly reduced the cost of manufacture and therefore the selling price, and the company found it difficult to compete with the larger mills equipped with their own pulp-making and wood-grinding machinery.

During all these years, the Peninsular Paper Company had been making rag papers. The machinery of the mill had been selected and installed for rag paper production; the paper makers were "rag men." At that time, long lines of rag gatherers' carts and wagons extended each morning for a long distance down the river awaiting the opening of the mill. Since newsprint was no longer being made of rag stock, it was perfectly natural that the men in charge of the mills business should turn to other kinds of papers for which their experience and facilities were best adapted, and in which some rag stock as well as wood pulp could be used.

The new lines of Peninsular Covers and other specialties were introduced and placed on the market about 1900. It was necessary to make many changes in both equipment and manner of operating the mill to suit the new conditions and to further increase the production. The sales plans and policies had also to be changed. The company has been operating ever since on more or less specialty lines until World War II, when it became necessary to make papers essential to the government, directly and indirectly, and to war defense plants, in order to obtain raw material and supplies which are allocated by the government. The Peninsular Paper Company is a very small mill, as mills go today, but being small, it has specialized in papers that can be made to order in smaller lots, and are not as competitive, and for which the customer is willing to pay an extra price.

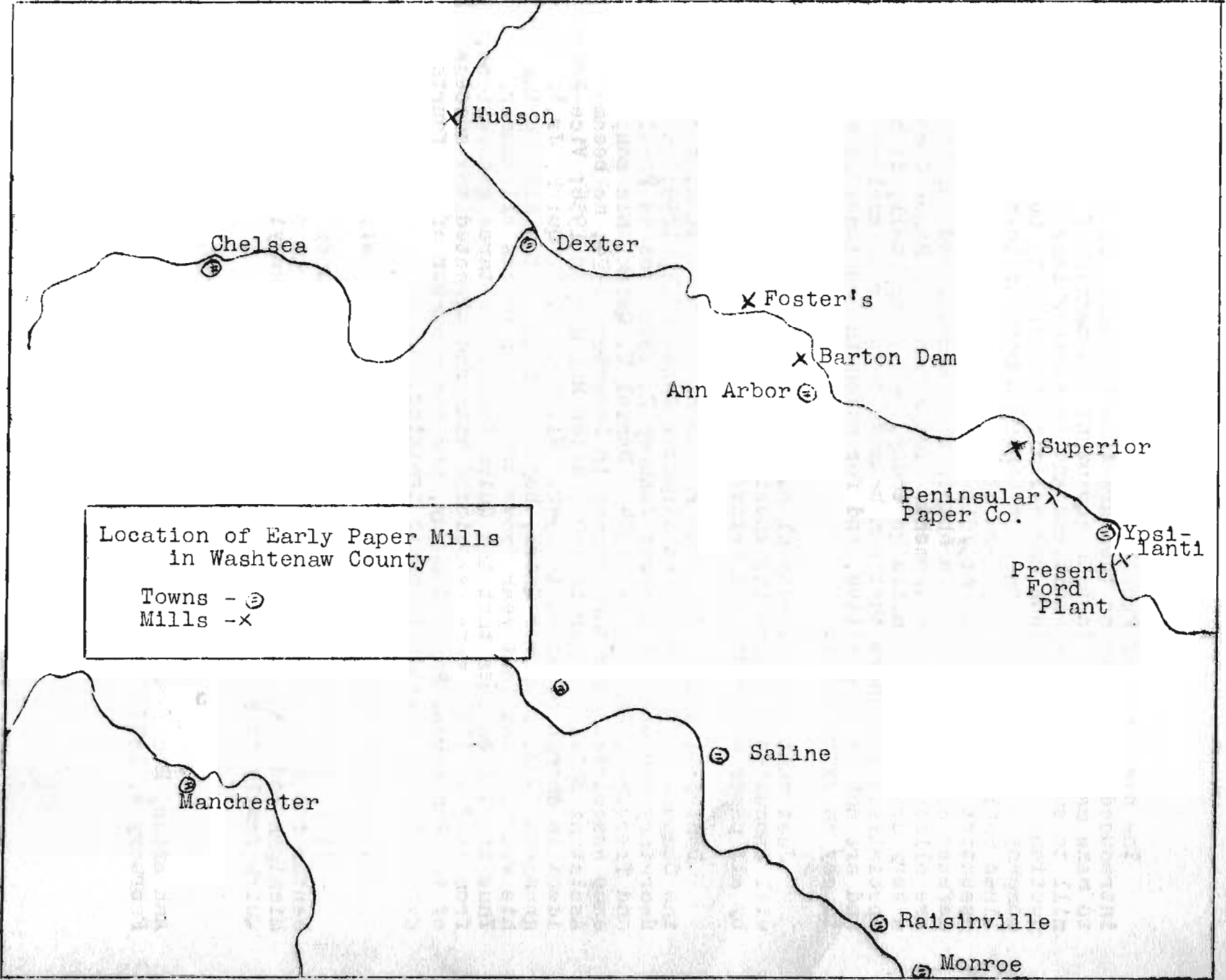
Just what the post-war plans will be are undecided, but it will undoubtedly resume its specialty lines which are so well known by all paper merchants and printers from coast to coast.

Daniel L. Quirk, Jr., the President, became associated with the Company as Treasurer and director January 11, 1899; and as Secretary and General Manager January 2, 1902; and as President and Treasurer, January 14, 1914. Daniel T. Quirk, his son, became associated with the Company in December, 1924; he became Assistant Sales Manager in 1929; Sales Manager in 1936; Vice-President in charge of Sales in 1942. His son, D. L. Quirk, Jr.'s grandson, Daniel Grover Quirk, began working at the mill during his vacation and last year drove one of our trucks all summer. Thus it will be seen that the Quirk family for three generations, from 1867 to 1944, were associated with and directed the success of the Peninsular Paper Company, and now a member of the fourth generation is taking his basic training.

The sales of the company for 1943 were over \$1,300,00.00.

It is interesting to see that Washtenaw County has been a center for many paper mills since they first began operating in Michigan and that there is still one left and carrying on the Quirk family tradition.

Ann Arbor, Michigan
February 4, 1944.



Location of Early Paper Mills
in Washtenaw County

Towns - e
Mills - x

x Hudson

e Chelsea

e Dexter

x Foster's

x Barton Dam

e Ann Arbor

* Superior

x Peninsular Paper Co.

e Ypsilanti

x Present Ford Plant

e Saline

e Manchester

e Raisinville

e Monroe