

THE LEATHER INDUSTRY IN DELAWARE

WILMINGTON

DELAWARE FEDERAL WRITERS' PROJECT
1939

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William J. Sutherland
October 4, 1939

Industry and Commerce:

Leather

CURRENT FILE

I

FOREWORD

Leather in 593 B. C.

In 593 B. C., in describing the brilliant dresses and horse harness of the Babylonians, the Chaldeans, Pekods, Shoas, Koas, and all the Assyrians with them, girded with girdles upon their loins, clothed most gorgeously, all of them captains and rulers, great lords and renowned, riding upon horses, the trappings of which were replete with rich and beautiful colors, Ezekiel conveys some idea of the grandeur which prevailed and the brilliant color of the dyed leather in use at the time he was prophesying the ruin of the two great kingdoms. Leather was also used in the remotest ages by the Israelites as a material to write upon, for they used strips made of leather for the purpose. According to the testimony of Herodotus, the ancient Ionians wrote their annals upon sheep-skins and the ancient Persians, likewise, according to Diodorus of Sicily.

Herodotus also tells us that the ancient Libyans wore leather clothing; the Ichthyophagists on the banks of the Araxes dressed themselves in seal-skins, and in the time of Alexander the wild inhabitants of Geodrosia used the hides of animals for clothing and covered their dwellings with leather.

For many years leather was used by the Greeks in the construction of ships, and especially by the Phoenicians, who originally inhabited an arid, sandy corner of the earth, between the Red Sea and the Mediterranean, where the soil was not favorable to the growth of timber, and they were obliged to supply its place by covering their boats,

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constructed of willows woven together, with leather or hides, which even thus early were subjected to a certain amount of dressing. The ancient Germans, also, who lived on the seacoast, and the original Britons, equally possessed the custom. Homer praises the splendid half boots of Agamemnon, and Hesoid recommended leather shoes lined with fur.

Homer has perpetuated the name of a tanner who showed kindness to the beggar poet, and now, after passing undying through the ages gone, we are charmed by his lines to-day, which are in praise of his friend, and of good cheer for the working-men who were employed in the tannery which he so frequently visited, and where he was at all times well received.

That the preparation or tanning of hides was discovered centuries ago, and that leather produced was employed for the same purpose as at present, is shown by the following old proverb, which is a proof that leather shoes were already worn at that time, viz: "We must not steal leather to give away shoes in God's name." This refers to the legend of St. Cripsin, who stole leather to make shoes out of it for the poor.

Source: Manufacturing of Leather, by Charles Thomas Davis. Published by Henry Carey Baird, Philadelphia, Pa. 1885. Pages 57-58.

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II

Beginnings of Leather in Delaware

1684

Ordered 26 $\frac{4}{m}$ 1684 unto John Grub a Tract of land in the County of New Castle granted unto him for a tan yard 4 acres in the lot, surveyed 9 $\frac{3}{m}$ 1691.

Source: New Castle Surveys, page 230.

1689

Milford, Sussex County, Delaware

Important industries began to spring up in the vicinity after Milford was laid out, among which were Quercitron mills and tanneries.

Source: Bevan's History of Delaware. Vol. 2, p. 865. 1929.

1693

Indian River Hundred, Sussex County, Delaware

William Robinson, a tanner, settled in Angola Neck on a tract of land which had been patented as early as 1677 and purchased by him. This estate was enlarged by subsequent purchases, and remained in the Robinson family several years.

Source: Conrad, History of Delaware. Vol. 2, p. 723. 1908.

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COLONIAL PERIOD OF LEATHER IN DELAWARE. (1700-1775)

Georgetown Hundred, Sussex County, Delaware.

In the early settlement of the town the tanning business was extensively carried on, small tanneries in various parts of the town were in successful operation for many years, while steam sawmills and foundries were operated to some extent.

Source: Conrad's History of Delaware. Vol. 2, pg. 730. 1908.

1732

Francis Robinson, Tanner.

Francis Robinson, a Friend, emigrated to Wilmington, Delaware, from County Wicklow, Ireland in 1732, and bought the land now bounded by Market, King, Fourth, and Fifth streets. In the centre of this square, in his newly-built house he engaged in the preparation of buckskins and chamois leather. Nicholas Robinson, his son, during the leisure hours, shot squirrels in the thickly-wooded land now embraced in the same square, and afterward succeeded his father. When he retired, William, his son, took the business and in 1823 was the first person in Wilmington to manufacture moroccos. For seven years with about a dozen employees, he carried on the business, and in 1830 with James Rice as partner, built a foundry at Tenth and Orange streets. He removed to Philadelphia and later to Baltimore. Francis Robinson, his brother, together with his brother Harrison in 1833, and for eleven years afterward, engaged in cleaning and preparing imported wool on the

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site where his ancestors had previously conducted the tannery. This square for a century and a quarter was owned by the Robinsons. Hanson Robinson went to Philadelphia in 1843 and began the wool business on Front street, below Chesnut street. In 1855 he built as his country residence Woolton Hall, Brandywine Hundred, where he died in March 1871.

Source: Scharf's History of Delaware. Vol. 2, pp. 650, 651. 1888.

1748

Dress in New Sweden, Delaware

Before the English came to settle here, the Swedes could not get as many clothes as they needed, and were therefore obliged to get along as well as they could. The men wore waistcoats and breeches of skins. Hats were not in fashion, and they made little caps, provided with flaps, some made fur caps. They had worsted stockings. Their shoes were of their own making. Some of them had learned to prepare leather, and to make common shoes, with heels, but those who were not shoemakers by profession took the length of their feet and sewed the leather together accordingly, taking a piece for the sole, one for the hindquarters, and another one for the uppers. These shoes were called "kippaka."

At that time, they likewise sowed flax here, and wove linen cloth. Hemp was not to be had, and they made use of linen and wild hemp for fishing tackle. The women were dressed in jacket and petticoats of skins. Their beds, excepting the sheets, were skins of various animals such as bears, wolves, etc.

Source: Peter Kalm's Travels in North America by Adolph B. Benson. Vol. I, pg. 272. 1937.

1758

Newport, New Castle County, Delaware

Lewis Stone carried on a tannery business very extensively, having two bark mills, one on the Tatnall, the other on the present Cranston wharf, where Thomas Seal also tanned.

Source: Scharf's History of Delaware. Vol. 2, pg. 894. 1889.

1758

Rivalling shipbuilding and flour milling, the tanning of leather and dressing morocco are among the oldest manufacturing interests in Wilmington. In the Pennsylvania Gazette, an advertisement of the sale of a tan yard, which belonged to Davis Ferris, was printed on September 7th, 1758. The advertisement follows:

"A commodious tan yard conveniently situated with suitable buildings and utensils for carrying on the business, and a spring of good water, which is conveyed in spouts to all the parts of the yard."

Tan yards were located on West Second street and Tatnall street above Fifth. Here the business was carried on for many years. During the years preceding and following the Civil War, a number of morocco firms functioned largely, and added to the industrial prosperity of Wilmington. These, one by one, have been dissolved or absorbed into larger concerns.

Source: Wilmington, Three Centuries Under Four Flags by Anna T. Lincoln. Pp. 265-268.

1761

David Witherspoon, Leather Tanner, Middletown, New Castle Co., Delaware.

The earliest industry in Middletown of which there is any record was the old Peterson tannery. In 1761 it was owned by David Witherspoon who had purchased it of the heirs of Adam Peterson. After the death of David Witherspoon it passed into the hands of his nephew, Thomas Witherspoon, who operated it for some years. At a later period it became the property of Philip Reading, a son of the last missionary sent by the Society for the Propagation of the Gospel in Foreign Parts to Saint Anne's Church. Philip Reading, Junior, married a Miss Peterson and was the last one to operate the tannery. The old brick building now used by William Green for a barn, was the barkhouse of the tannery.

Source: Scharf's History of Delaware. Vol. 2, p. 998. 1888

1764

Quercitron

The black oak bark or Quercitron of commerce, so extensively exported for making yellow dye, was first sent to England before the Revolution from Wilmington, Delaware, where an export trade in the article was established soon after the Peace by one of the discoverers of its valuable dyeing properties. As early as the middle of the last century, 1764, ^{there was} ~~conducted~~ a large and very complete tannery in Wilmington, Delaware, and Zachariah Ferris, a minister among the Friends, had one at a later period on the north side of the present Second street, above West street.

Source: History of American Manufactures by J. Leander Bishop. p.461.

III.

1765

Odessa, New Castle County, Delaware

Odessa, about three and one-half miles from Middletown, is next to the latter in importance among the communities of St. Georges Hundred. There in 1765 William Corbit established a tannery. All kinds of leather were made here until 1854, when a scarcity of tanbark ended the tanning business. In 1840 Daniel Corbit was a tanner there.

Source: Bevan's History of Delaware, Vol. 2, p. 806-807. 1929.

1765

William Corbit, Tanner, Odessa, Delaware

The first industry at Odessa was the tannery opened by William Corbit in 1765. It was situated near the Appoquinimink Creek and was operated by him until 1810. During the Revolutionary War a Lieutenant and a squad of soldiers from General Washington's army came here after some leather, Mr. Corbit refused to negotiate with them, but they demanded the leather and when it was not forthcoming they proceeded to search for it. The leather was stored in the cellar of the house occupied by Daniel Corbit. The soldiers found it and took it away with them, leaving Continental currency to the amount of the supposed valuation of the leather. In 1810 Pennel Corbit took possession of the tannery, and managed it until his death in December 1819. It was then purchased of his heirs by Daniel Corbit who operated it until 1854, when the scarcity of bark led to its abandonment. All kinds of leather were manufactured quite extensively. The tannery has since been converted into dwellings.

Source: Scharf's History of Delaware. Vol. 2, p 1007. 1888.

1766

John Baring, Saddler, Dover, Delaware

John Baring, saddler, on June 10, 1766, bought of the Dover Commissioners a lot on King street, to South street, and east to East street, where he built a dwelling, in which he also kept a store during the Revolution and on June 18th, purchased thirteen lots south and east of the Reverend Charles Inglass. He was a member of the Council in 1791, and died in that year. His dwelling became the Dover

Academy, and now is the carriage shop of W. A. Reilly.

Source: Scharf's History of Delaware. Vol. 2, p. 1047. 1888.

1771

Middletown, Delaware

Thomas Witherspoon, nephew of David Witherspoon, received his uncle's estate, and ran the old Peterson tannery at Middletown. He married Susanna, the daughter of Doctor Sluyter, who lived at Middletown.

Source: Conrad's History of Delaware, vol. 2, p. 548. 1908.

1772

Allen McLane, Leather, Smyrna, Kent Co. Delaware

To Allen McLane, leather breeches maker, was given on January 4, 1772, four acres on the west side of the main road, and one acre on the east side.

Source: Scharf's History of Delaware, p. 1099. Vol. 2. 1888.

1774

John Lewden, Tanner, Newcastle Hundred, Delaware

John Lewden had a tanyard about the time of the Revolution, in 1774, which he carried on until his death, when his son Jeremiah engaged in the same business until it was abandoned.

Source: Scharf's History of Delaware. Vol. 2, p. 853. 1888.

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LEATHER IN REVOLUTIONARY PERIOD IN DELAWARE (1775-1800)

1780

Camden, Kent County, Delaware

On February 8, 1780, Edwin Cole bought a lot and built a brick house in the forks of the road, which later was occupied by Samuel Williams, a hatter, and sold August 15, 1787, to Peter Lowber, a tanner. Source: Scharf's History of Delaware. Vol. 2, p. 1132. 1888.

1787

Willow Grove, Kent Co., Delaware

On the second day of March 1787, Jackson sold five acres to Thomas Lockwood, upon which he had a tanyard. About the same time a store and a shop were opened. From the establishing of the tannery Willow Grove dates its existence.

Willow Grove is situated nine and one-half miles southwest from Dover and three and one-half miles west of Woodside, the nearest railroad point. Jackson built a house on the opposite side of the Choptank Road from the tannery, called the "Jackson Mansion," a gambrel-roofed building, now in a good state of preservation^{and in the possession} of John C. Gooden. The tanning business was carried on by Thomas Lockwood till his death in 1824. In 1857 the tannery was in possession of Ambrose Broadaway, who continued the business till his death, in 1876. In 1890 the tannery was closed and the buildings since converted into a dwelling. In 1844 there were two general stores, dealing in grain, bark, cordwood, staves, etc., and general merchandise.

Source: Scharf's History of Delaware. Vol. 2, p. 1142. 1888.

IV

1796

Dagsboro, Sussex County, Delaware

An early industry of this place was Clayton's tannery, built by James Clayton in 1796, or earlier.

Source: Bevan's History of Delaware. Vol. 2, pg. 858. 1929

1797

John Patterson and Son, Wilmington, Delaware

In 1797 John Patterson and Son manufactured saddles on the west side of Market Street, next door to the Sign of the White Hart Tavern, and William Bryant had a shoemaker's shop near by.

Source: Scharf's History of Delaware. Vol. 2, p. 760. 1888.

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LEATHER IN DELAWARE IN 19th CENTURY

1804

Christiana Hundred, New Castle County, Delaware

Among the manufacturing interests in the year 1804, the following tanners were in business.

John Smith, James Starr, Thomas A. Springer, William Seal, Joseph Wilkinson. Many of these tanneries changed ownership in the course of the next two decades, and the tanneries fell into disuse.

Source: Scharf's History of Delaware. Vol. 2, pp. 835, 886. 1888.

Leather in 1807

In Delaware in 1807 the inhabitants manufactured the greater part of their wearing apparel. They also manufactured leather, shoes, boots and saddles.

Source: State of Maryland and Delaware by Joseph Scott. p. 171. 1807.

1810

Robert Houston, son of John, Tannery, Sussex Co. Delaware

Robert Houston, tanner, established in 1810 as an individual concern, used horsepower. Capital invested in ground and buildings, water power and machinery \$2,000, average amount in materials and cash for purchase of materials and payment of wages, \$6,000. Annual rate

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of profit \$1,000. Twelve hundred sides of leather tanned annually, hides brought from Spanish America. Number of employees 3 men and 1 boy. Fifteen Dollars for men and six dollars for boys a month. Time employed each day, 10 hours a day all the year. One horse employed, products sent to Philadelphia, one hundred and twenty miles.

Source: Executive Documents. First Session, 22nd Congress. 1831-1832. Document 16, vol. 2, p. 829.

1811

John Richards, Sole Leather Manufacturer, Georgetown, Sussex Co., Delaware.

The factory of John Richards is situated in Sussex County, product sole leather, and operated by horsepower. Established about the year 1811. For three years it was a joint concern and owned exclusively by John Richards. Capital invested in ground and buildings, water power and machinery. The yard is under an annual rent of \$150. Investment in machinery inconsiderable, say \$150. Average amount in materials and in cash for the purchase of materials and payment of wages.

I purchase annually \$2,000 worth of bark, \$8,000 worth of Spanish hides. Pay for wages, labor, horse hire, etc. \$2,000 annually. My annual rate of profit is that clear of the expenses of the yard. I make a profit of \$1,000 annually, or about thirty-three per cent on capital invested. Profits have increased within the last two or three years. The number of tanners has been very considerably diminished within a few years, the capital invested

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by no means so great, and the demand has gradually increased owing to the increasing trade and population of the country. The annual amount of manufactured sole leather about \$15,000. I deal exclusively in Spanish hides. Number of employees and average wages, six men at an average of \$15 a month. I have in my family twelve persons depending on my business. Hours employed from sunrise to sunset, allowing one hour for each meal in the day. Product sold in Philadelphia, generally sold upon a credit of from 3 to 6 months, and frequently barter the manufactured article for raw hides.

Source: Executive Documents. Vol. 2. Document 15, No. 16. First Session, 22nd Congress, p. 684.

1814

Shoemakers in the year 1814, Brandywine Village,
Delaware.

Isaac Poulson, George Poulson, William Smith, and Davis Walker.

Source: Scharf's History of Delaware. Vol. 2, pp 647, 648. 1888.

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1814

Tanners and Curriers in the year 1814, Wilmington, Delaware

William Brown	-	22 E. High Street.
Thomas Lock	-	Orange between 2nd and Third Streets.
Thomas Ring	-	39 King Street.
William and Caleb Seal	-	West Cor. Hanover Street.
Thomas Smith	-	West 2nd beyond Tatnall Street.
Joshua Starr	-	West between 2nd and 3rd Streets.
Thomas Stanton	-	West High between Tatnall and West Streets.
Benjamin Webb	-	West between Hanover and Queen Streets.
Robert Wilkinson & Co.		40 W. High Street.
Wilson, Carson and David	-	West 3rd near Tatnall Street.
William Chandler	-	15 Shipley Street
Robert Squibb	-	24 W. High Street
Trip and Bonsall	-	Cor. Tatnall and Second Streets

Source: Scharf's History of Delaware. Vol. 2, pp. 644, 645, 646, 647.
1888.

1815

Millsboro, Sussex County, Delaware.

A very large tanning business was done here for fifty years from 1815, when Colonel William D. Waples built the tannery. It passed to the Burton family in 1845.

Source: Bevan's History of Delaware. Vol. 2, p. 867. 1929.

1815

Dagsboro Hundred, Sussex County, Delaware

In 1815 Colonel William D. Waples erected a large tannery in Millsboro, and carried on a most successful business until 1845, when it passed into the hands of Daniel and David Burton, who were succeeded in 1855 by Benjamin Burton, who operated it for ten years, and sold it to John Burton, who in 1865 abandoned the business.

Source: Conrad's History of Delaware. Vol. 2, p. 734. 1908.

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1816

Canterbury, Kent County, Delaware

In 1816 mention is made of a tanyard owned by Jonathan Neal, opposite a storehouse formerly belonging to Gildersleeve.

Source: Scharf's History of Delaware. Vol. 2, p. 1141. 1888.

1816

Milton, Sussex County, Delaware

A tanyard was in operation in Milton, Sussex County, in 1816 under the proprietorship of Nathaniel Lofland. It was last owned and operated by Robert Burton, about 1830.

Source: Scharf's History of Delaware, vol. 2, p. 1266. 1888.

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1817

Dagsborough Hundred, Sussex County, Delaware

In 1817 Aaron Marvel established a tannery on the road from Millsborough to Pine Grove, which was abandoned in 1837, and is now called Marvel's old Tanyard.

In 1875 Notten Marvel established a tanyard near Pine Grove.

Source: Scharf's History of Delaware. Vol. 2, p. 1337.

1819

James Watson, Saddlery, etc. New Castle County, Delaware

James Watson manufactured saddle, harness and trunks. Established in 1819, a private concern. Capital invested, \$1,600; average amount in materials and payment of wages between \$6,000 and \$7,000. Amount in manufactured articles since 1819 to 1831 were 750 dozen bridles; 50 saddles, 50 sets of harness, 300 trunks. The quantity and value of different kinds of raw materials used, distinguishing between foreign products and domestic products were \$4,000 domestic and \$1,000 foreign. Employees were seven men and three women, men at \$18 per month, women

at \$3 a week. Hours of employment were 13 hours a day. The principal part of manufactures were sent to Philadelphia. Had very little competition, no exports, products sold for cash. Saddles sold from \$5 to \$20 each, bridles from \$8 to \$20 per dozen. Carriage harness \$20 to \$60 for a double set, draft harness \$8 to \$12 a single set, trunks from \$3.50 cents to \$12 each. Amount of capital, \$1,000, none borrowed.

Source: Executive Documents. Vol. 2, Dec. 15, No. 39. 1st Session 22nd Congress 1831-32. p. 718.

1822

Little Creek Hundred, Sussex County, Delaware

On Rossaketurn Branch were the "Little Mills" of Barkley Townsend, mentioned as the beginning of the limits of the village of Laurel. They consist of a gristmill, bark mill and carding factory. At the death of Townsend they became the property of his son-in-law, John Skinner. In 1822 they belonged to William Cooper, who also opened up a tanyard at this place.

Source: Scharf's History of Delaware. Vol. 2, pp. 1320, 1321.

1824

New Castle County

At Mill Creek Hundred in 1824, Robert Crawford's tanyard was on Muddy Run. Afterwards converted into a bark mill, but not operated since 1860.

Source Scharf's History of Delaware. Vol. 2, p. 923.

1824

John M. Darby's Tannery and Shoe Factory, Kent County, Delaware.

Factory situated in Kent County, Delaware, a tannery and shoe factory, operated by horse power. Established in 1824, a private concern. Capital invested, \$3,000 in ground and buildings, water power and machinery. Average amount in materials \$7,000; average of wages \$2,500.

The amount of articles annually manufactured since the establishment of the factory was from \$10,000 to \$12,000 annually, first and second quality. Foreign hides amount to \$3,000; other raw materials at \$5,000. Employees numbered twenty men and boys, average wage of each class from \$15 to \$20 a month; work hours at ten hours for twelve months. Animals, 3 horses and 2 oxen. The market for the product was divided half at Philadelphia, and half at home. No foreign articles of like kind enter into competition with them at such place of sale. The manufactured products are consumed in the United States. Sales were made from four to six months' credit. Sole sold from 22 to 27 cents, upper leather from \$3.50 to \$4.25 per side. The rate of profits were from 15 to 20 per cent.

Source: Executive Documents, Vol. 2, Document 15, No. 10. First Session. 22nd Congress. Page 675.

1825

John L. Devon, New Castle County, Delaware

John Devon, boot and shoemaker, established in 1825 a private concern. Capital invested in ground and buildings, water power and machinery, \$3,000. Materials and wages, \$2,600. Number of employees 10 men and 4 women, average wage for men \$6 women \$1.62 cents a week, worked 12 hours a day. No foreign competition, manufactured articles sold in Delaware, no exports, products generally sold for cash. Prices ranged for men's boots from \$4 to \$6, shoes from \$1.25 to \$2.25, ladies' boots from \$1.25 to \$2.75, shoes from 50 cents to \$1.37.

Source: Executive Documents, Vol. 2, Document 15-34, 1st Session. 2nd Congress, p. 714. 1831-32.

1826

Smyrna, Delaware, Kent County.

At Duck Creek was the Lowber tannery, and in Smyrna itself was the Peterson tannery, which for many years after 1826 was one of the institutions of the town.

Source: Bevan's History of Delaware. Vol. 2, p. 851. 1929.

1826

John and Alexander Peterson, Smyrna, Kent County, Delaware

In 1826 John and Alexander Peterson opened a tannery in Smyrna, near the corner of Mount Vernon and Union streets. In 1837 John sold his share to John Mustard, and the tannery was conducted by him and Alexander Peterson under the style of Peterson and Mustard, until the death of Peterson in 1868. It then was operated till 1875 by John and Horace Mustard, and then abandoned. In addition to tanning, quercitron bark was ground from 1850 to 1877. The bark is used for dyeing purposes, and is principally shipped to Europe. The capacity for grinding was one thousand tons a year. The tannery had a capacity of five thousand hides a year and the principal tan was sole leather. In 1883 Horace R. Mustard and A. Lee Cummings formed a copartnership for the purpose of manufacturing baskets. The old tannery buildings were fitted up with machinery adapted to that use, and have been since operated as a basket factory.

Source: Scharf's History of Delaware. Vol. 2, p. 1108.

1827

William Countess, Saddler, Wilmington, Delaware.

William Countess manufactured saddlery and harness by hand power, established in 1827, a private concern. Capital invested in ground and buildings \$2,000; average amount in materials about \$1,000, wages \$500 a year. Raw materials used amounted to \$2,500 of which \$50 worth was of foreign manufacture. Labor amounted to two men and one woman, men were paid \$7 a week, women \$1.50, worked by the piece. Products were sold at the factory, no competition from foreign articles, no

exports, and sales were made for cash. Prices at from \$7 to \$17 each, bridles from 75 cents to \$5.00, harness wagon from \$15 to \$25, a set for one horse, carriage harness for one horse from \$12 to \$50. Cannot make any reports on profits, as I did not keep any particular account.

Source: Executive Document 14, No. 40, Vol. 2, p. 720. First Session. 22nd Cong. 1831-1832.

1827

Stephen Boddy, Saddle, Harness, Trunk Manufacturer

Stephen Boddy, located in New Castle County, Delaware, a manufacturer of saddles, harness and trunks, hand power used, established in 1827, a private concern. Capital invested in ground and buildings, water and machinery amounted to \$3500. Average amount in materials and in cash for the purchase of materials and payment of wages amounted to \$100 altogether. Amount of articles annually manufactured since the establishment of the factory about \$1,000 per annum. Value of raw materials used \$12,000, mostly domestic. Two men were employed at an average of \$5 to \$6 a week, number of hours of labor daily, twelve hours a day all the year, no foreign competition, no exports, products were sold in the country around. Products sold for cash. Saddles sold from \$9 to \$18, trunks at \$1 a foot, carriage harness from \$12 to \$30, a set for one horse, draught harness for wagons, carts, etc. from \$6 to \$20, a set for one horse.

Source: Executive Documents. Vol. 2, Doc. 15, No. 41. First Session. 22nd Congress 1831-1832. P. 721.

1827

Wilmington, Delaware

In 1827 John Guyer moved his tannery from Shipley to Market Street.

Source: Scharf's History of Delaware. 1888. Vol.2, pg. 1166.

1828

Whiteleysburg, Delaware

About nine and a quarter miles southwest of Felton, on the road to Denton, Maryland, is the village of Whiteleysburg, located on land formerly the property of Arthur John Whiteley. About sixty years ago it was a thriving village, containing an extensive tannery, owned by the Lockwood Brothers, one general store, wheelwright and blacksmith shop, eight families and a population of about fifty. Today it contains one general store, three dwellings and a blacksmith shop.

Source: Scharf's History of Delaware. 1888. Vol. 2, p. 1166.

1828

James Carson, Tanner New Castle County, Delaware.

James Carson's tannery, situated in New Castle County, Delaware, in the year 1828, capital investment in ground, buildings, water power and machinery amounted to \$3,000, in materials and wages, payment \$5,350. During the year they tanned one thousand hides, and used 125 cords of bark. The number of men, women and children employed, and average wage of each class, one man, two boys, wages for the man \$17 a month, the ^{boys} two

\$1.50 a week. They worked for twelve hours. The work was done by hand power and one horse. The manufactured goods were sold at the tannery, amounting to about two-thirds of the products, and one-third in Philadelphia. The product generally sold at ninety days.

Source: Executive Document. No. 62, Vol. 2, p. 747. First and Second Congress. 1831-1832.

1829

William Magens, Boot Shoe and Trunk Factory, New Castle County, Delaware

William Magens, established in 1829, a private concern for the manufacture of boots, shoes, and trunks. The ground and buildings cost \$4,500; materials and payment of wages \$4,000. Raw materials of different kinds about \$2,000 worth, principally domestic. Employees were twenty men and five women; men were paid four dollars a week, women one dollar and a half; hours of labor twelve a day, the year around. Product principally sold at home, some sent to Philadelphia, no foreign competition, no export. Products sold for cash, or credit for four months. Leather trunks, \$3 a foot, hair trunks 87 cents a foot. Boots from \$3 to \$6 a pair; shoes from \$1.50 to \$2.50 a pair. Raw materials, \$2,000; wages \$2,000; amount of capital \$3,000.

Source: Executive Document. Vol. 2, Doc. 15. #33. 1st Sess. 22 Cong. 1831-32. p. 712.

1829

Thomas Crawford, Tanner, White Clay Creek, New Castle County, Delaware.

Thomas Crawford's Tannery, situated at Whiteclay Creek, New Castle County, Delaware for the tanning of leather, operated by water power,

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established in 1829, a private concern. Capital invested amounted to \$6,000, cash for purchase of materials, \$3,500; wages \$1,296 per annum.

The amount of hides manufactured annually since its establishment was 500 hides. Employees six men at \$18 a month each, hours of labor 12, two horses used. The manufactured product was sent to Wilmington and Philadelphia. None of the products were sent to foreign countries.

Source: Executive Document 15. No. 59, Vol. 2. p. 744. 1831-1832.

1829

Morocco and Leather Industries

Wilmington for years was noted for its leather products. From 1860 to 1890, very many establishments were engaged in the manufacture of leather, and it proved one of the most prosperous industries in the city. Of late years the number of manufactories has decreased, but possibly the capital invested is as large now as at the previous time. William Robinson as early as 1829 had a small leather plant on Market Street between Fourth and Fifth Streets, and about 1835 Lewis C. England started a small morocco tannery on Fifth Street near Orange, which continued until 1847. Among the apprentices of England was James Scott, who in 1845 joined with Israel Fusey and William Marr, and formed a partnership known as Fusey, Marr and Scott. The business was started at Third and Tatnall Streets and remained there until 1866. William Marr left the firm in 1849, the remaining members of the firm continuing.

In 1866 a new plant was established at Third and Madison Streets, and three years later John M. Scott and William Y. Warner became members of the firm, and the name changed to Fusey, Scott and Company. This continued until 1833, when the Fusey and Scott Company was incorporated with James Scott as president, J. Winfield Scott, treasurer, and William L. G. Thomas, secretary. For twenty-five years this company did a large

and profitable business, but about 1890 the company relinquished business and the concern was merged with the American Leather Co. which now occupies the old site.

Source: Conrad's History of Delaware. Vol. 1, p. 383. 1908.

1830

New Castle County

Robert Squib's tanyard at Stanton not operated since 1830.

Source: Scharf's History of Delaware. Vol. 2, p. 923.

1831

John Perkins, Saddler, New Castle County, Delaware.

John Perkins, a manufacturer of saddles, harness and bridles made by hand power, established in 1831, a private concern. No capital invested in ground and buildings, water power and machinery. Quantities manufactured in saddles, 80 to 100, price from \$7 to \$16, sets of harness from 50 to 60, price \$5 to \$30. Employed five hands and paid them from \$8 to \$15 per month. The number of days employed and what portion of the year, from March 10th to October 10th, from sunrise to setting; from October 10th to March 10th, from sunrise to 9 P.M. The products were readily sold in the State. Products sold for cash or barter; rate of profits were from twelve and one-half per cent to twenty-five per cent. Capital \$400; borrowed, none.

Source: Executive Documents. Vol. 2, Doc. 15. No. 42 First Session 22nd Congress. Page 722.

1831

T. B. Armstrong & Co. Mfys. of Leather, New Castle County.

Situated in New Castle County, the tannery was run by hand and horse power, established in 1831, and privately owned. Capital invested in ground and buildings, water power and machinery amounted to \$1,500, the average amount in materials, cash for purchase of and payment of wages was \$4,000 to \$5,000. They manufactured during the year eight hundred sides, four hundred of which were foreign and four were domestic. They employed two men at \$20 a month each, one boy at \$12 a month. The hours were twelve hours a day all the year. For the power to operate they used two horses. The product was sold in Wilmington and Philadelphia, sold on a credit of four months generally. The price was 22 cents a pound for leather.

Source: Executive Documents 15. No. 60, Vol. 2. First and Second Congress. 1831 to 1832. P. 745.

1833

Georgetown, Sussex County, Delaware

Among the early industries of the region were several tanneries.

Source: Bevan's History of Delaware. Vol. 2, p. 859. 1929.

1841

Wilmington, Delaware. Patent Issued

On May 15th, 1841, a Patent for compounds for depilating hides and skins, was issued by the Government of the United States of America to F. and H. Robinson, Wilmington, Delaware.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co., Philadelphia, Pa. 1885. P. 302.

1844

and
C. & J. Pyle Company, at Sixth and Monroe Streets, Wilmington, Delaware.

This company has a history dating from 1844. Patent leather is manufactured by only one firm, but that one does a very large business. The business was started in 1844 upon a small scale, on Orange Street between Fifth and Sixth, and removed to the present location three or four years later. The firm was not then constituted as now. It was under the style of C. W. Pyle and Co., and the individual members were Edwin A. Wilson, Cyrus Pyle, William Pyle and James Webb. About 1850 the title became Pyle, Wilson and Pyle, and in 1861 was first known as C. and J. Pyle. The present incorporated company dates its existence from April 1885. The officers are Joseph Pyle, president, Frank Pyle, vice-president, Willard S. Pyle, secretary, and Fred Pyle, treasurer. The property embraces a whole square, the offices being at Sixth and Monroe streets. In addition to this the company bought in 1887, a tract of eight acres of ground across the Christiansa, upon which they erected a second factory, of which the main building is fifty by one hundred and twenty-five feet. The company commenced shipping to England about 1878, and now sends across the water upon an average of five hundred sides of patent leather per week, about one half of the total output. The services of about eighty men and of a hundred and twenty-five horse power engine are required, and they are kept constantly employed, for the smoothness with which the affairs of this house is carried on is one of its notable features. The operatives are well treated and strikes have been an unknown thing. The business has been slowly and evenly developed to its present proportions through all the years since 1844, showing a prudence and care on the part of the managers as well as the possession of rare skill necessary to the best markets. Mr. Joseph Pyle, the present head of the house, is a man of practical experience in the

manufacture of patent leather and the inventor of a valuable "softening" machine, now in use at the factory.

Source: Scharf's History of Delaware. Vol. 2, p. 793. 1888.

1845

Pusey and Scott Company

The oldest house in the city in the line of manufacture is that of Pusey and Scott Company, at Third and Madison Streets. It was established in 1845 by Pusey, Marr and Scott, the individual members of the firm being Israel Pusey, William Marr and James Scott. They commenced operations in a small building at Third and Tatnall Streets, and remained there until 1866, when they came to the present stand. In the meantime in 1849, Mr. Marr had left the firm, going to California when the gold fever had sent its infection east. In 1869 the firm became Pusey, Scott and Company, John Scott and William Y. Warner being the silent partners. Then the firm remained unchanged until the death of Israel Pusey about ten years ago, and even after that there was no alteration in the style of the house, the name of the deceased partner and founder being still retained, when in 1883 the house was incorporated as the Pusey and Scott Co., which was constituted by James Scott, J. Winfield Scott and W. L. G. Thomas, who are now respectively, President, Treasurer and Secretary. The capacity of the factory is about two hundred dozens per day, and when business is at its height of activity, about one hundred and seventy-five men are employed, the average force being about one hundred and fifty. The building is of brick, four stories in height upon the street, and five stories upon the yard side. It has a frontage of one hundred and eighty-six feet

on Third Street, and fifty-eight feet on Madison Street. The works are admirably systematized and divided into departments for the effective prosecution of the work. The specialties of manufacture are known to the trade as kid, dongola finish, pebbles, etc. The trade of the house extends throughout the United States and Canada, and for the convenience of the business, the company have established branch houses in Philadelphia and Cincinnati.

William Robinsen, prior to 1829, established works on a limited scale on Market Street, between Fourth and Fifth Streets. John Scott worked with him in that year. About 1835 Lewis C. England established morocco works at Fifth and Orange Streets, and continued until 1847. James Scott, later of the firm of Pusey and Scott Company was apprenticed to him in 1837.

Source: Scharf's History of Delaware. Vol. 2, p. 789. 1898.

1846-1848

Red Lion, New Castle County, Delaware

During the Mexican War, a shoe factory was busy here on government contracts.

Source: Bevan's History of Delaware. Vol. 2, p. 808. 1929.

1848

Wilmington, Delaware. Patent Issued

On February, 22nd, 1848, a Patent for leather splitting machines, was issued by the Government of the United States of America to J. P. Fairlamp, Wilmington, Delaware.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co. Philadelphia, Pa. 1885. p. 383.

1848

Joshua Conner and Son, Wilmington, Delaware

Joshua Conner and Son, 235-237 Market Street, 80 years in business and made a remarkable progress since 1883, one of the oldest business concerns, known all over the country for the excellence of its leather goods and workmanship in saddlery, harness makings, and skillful repair work, is drawing to a close in its 80th year in the Market Street location. The business itself is even older, having been started by James Conner, grandfather of the present owner of the business, who in 1833 started a modest harnessmaking business at Anvil, Pa., a place on the stage coach line of that period.

James Conner learned his trade in Wilmington under one of the master harness makers of that day, Steve Boddy. When he started his business at Anvil, Pa., he was but 20 years old and had only \$94 of capital. Later young Conner moved his little harness making establishment to New London, Chester County, Pa. At New London there was an intersection of stage coach lines and more people were served. In 1847 the present building was constructed on Market Street. Here under the guidance of James Conner, who had moved back to Wilmington, it rapidly became the leading saddlery, harness making and trunk manufacturing firm in the State. At first James Conner had only the two upper floors. In 1880 James Conner died, then Joshua Conner, then 38 years old, assumed charge of the business. Circuses visiting here were always great customers of the Conner shop. Buffalo Bill and his show had a great deal of leather harness and bridle work done there. In 1909 Joshua Conner combined 235 and 237 Market Street into one fine large store and factory. In 1917 Joshua Conner died, but in 1915 he had taken his son, J. Christy Conner, into a partnership, and changed the name to Joshua Conner and Son, J. Christy Conner, representing the third generation, took over the

firm, and has striven to maintain the high standards and character of his father and grandfather. Hand work of the most skillful kind can still be turned out at the Conner store, and saddlery in pigskin and other leathers. The finest grades of leather are made up at this plant into bags, dress cases, manicure sets, fitted cases, travelling bags, wardrobe trunks, leather novelties and men's and women belts. Joshua Conner & Son have remarkable progress.

Source: Wilmington Every Evening. Page 12, 1928.

1848

Leather including tanning and dressing, the manufacture boots, shoes saddlery, harness, etc. In this department of industry many labor saving improvements were patented, one of which was the method of splitting leather by I. P. Fairlamb, Wilmington, Delaware.

Source: Bishop's History of American Manufacturers. Vol. 2, p. 446. 1848.

1850

J. Parke Postles and Company

Gen. J. Parke Postles has been in this business for himself since 1875, but the house dates much further back than that, and is in fact one of the oldest in the city. It was founded by Thomas H. Baynard and John Parsons in 1850, and Stephen Postles bought out the latter in 1853, the firm then becoming Baynard and Postles. At first they carried on business in a small way in an old stone building on Second Street, between Orange and Tatnall, which had before been used as a brewery, but they were so successful that they were enabled to erect a new building on

Fourth Street, the same which now with many enlargements, accommodates the business of J. Parke Postles. The elder Mr. Postles bought out his partner in 1858, and thus became sole proprietor. In 1866 he took into partnership his two sons, William and J. Parke Postles, the former of whom retired in 1866. In 1875 Stephen Postles retired, leaving his younger son in sole possession of the business, and thus carried it on until January 1885, when he admitted as a partner his brother-in-law, James S. Dobb, the firm receiving the name of J. Parke Postles and Co. The house employs from eighty to ninety hands in the manufacture of all kinds of morocco, but of late the chief product has been alum tanned in imitation of the French article for which a great demand has grown up. The output amounts to about sixty dozen skins per day, and one hundred dozen per day can be turned out if the occasion demands.

Source: Scharf's History of Delaware. Vol. 2, p. 790. 1888.

1851

J. C. Windolph, Locckerman Street, Dover, Delaware

One of the oldest and best-known establishments of this character in this town is that of Mr. J. C. Windolph. The business was originally established many years ago by the father of the present owner. After successfully managing it for thirty years, he turned it over to his son, who has been here for ten years past.

The premises are located on Locckerman Street. They are of ample proportions and fitted in the neatest and most commodious manner with every tool and appliance requisite for the pursuance of this craft.

Formerly a large stock was carried, but of late years custom work and repairing has been the main part of this business, and in this department the proprietor is equipped with facilities and experience

sufficient to cater to a first class trade.

Mr. Windolph has spent nearly all his business career in this line, and is thoroughly practical in every department. He commands the esteem of those with whom he forms business and social relations.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. P. 31. 1891.

1851

Laws of Delaware, Chapter CCCCXCIV

An Act to incorporate the Delaware Union Boot, Shoe and Leather Manufacturing Company of Wilmington, and to extend the provisions of the same to the Corporation in and by this act created.

Section 1. Be it enacted by the Senate and House of Representatives of the State of Delaware, in General Assembly met (two thirds of each branch of the Legislature concurring therein), That Wm. Chandler, Cyrus Pyle, John Pulmer, Israel Pusey, Henry S. McComb, Joshua Simmons, Jesse Lane, James L. Devon, James Webb, James Derry, now associated, and such others as may hereafter be associated with them, for the purpose of carrying on the manufacture of leather, and boots and shoes, or, any other articles which they may, from time to time adopt or substitute at Wilmington, in the county of New Castle, shall be and are hereby ordained and declared to be a body politic and corporate, by the name of the "Delaware Boot, Shoe and Leather Manufacturing Company of Wilmington" and by that name they and their successors and assigns, shall and may have continued their succession for twenty years and no longer, and be capable to sue and be sued in courts of law and equity, to purchase, take, enjoy, sell and alien lands, tenements, hereditaments, goods, chattels and effects of every nature which may be connected with, or conducive to

the purpose for which said company is established; to have a common seal; to ordain by-laws for their own government not repugnant to the constitution or laws of the United States, or of this State, and to enjoy the franchise incident to a corporation: Provided always, that the said corporation shall not have nor exercise any banking powers whatever, and that the said capital stock shall not exceed one hundred thousand dollars.

Source: Laws of Delaware. Vol. 10, p. 485. 1845-1852.

1852

Wilmington, Delaware. Patent Issued

On September 28th, 1852, a Patent for stoning, polishing, finishing, glassing, glazing, flinting, creasing, and dicing leather was issued by the Government of the United States of America to J. M. Poole, Wilmington, Delaware.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co., Philadelphia, Pa. p. 465. 1885.

1854

Milford Hundred, Kent County, Delaware

The earliest industries were those pertaining to tanning and lumber products. After Milford was laid out into town lots, tanneries sprang up along the Mispillion.

Source: Conrad's History of Delaware. Vol. 2, p. 680. 1908.

1856

A. S. Jones, 614 Shipley Street, Wilmington, Delaware

The leather trade has a good exponent here in the personage of Mr. A. S. Jones, in leather and shoe findings.

This gentleman established business in this city about thirty-five years ago. The quarters now occupied were taken about six years ago, and are fitted out with all the appliances known to the trade.

The building is about 20 by 50 feet in dimensions, extending through to Market Street, and is, without a doubt the largest house of this kind in the state. Leather and shoe materials of all kinds are handled.

Uppers are manufactured for the trade, and an immense trade done, being all over the state and adjacent territory. Custom shoes are also made. Six skilled workpeople are employed. Mr. Jones has been a resident of the city for many years.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa.
Pp. 192-193. 1891.

1857

The Tanners' Cheer

Adapted to the tune of the Marseillaise Hymn

Award of cheer to the hearty tanner,
And a blessing on his trade;
A leather bough shall be his banner,
Over all the land displayed.

Amid the forest-giants winding,
While far away the hunter's coil
Round the wild bull's neck is binding,
He marks the noblest for his spoil.

Work on ye Pitmen all;
And let the hide be sound;
Work on, joy to the land
Where working-men abound.

His labor gives the world protection
In an ever changing form,
From the summer sun's reflection
And the winter's raging storm

It guards the tread of the sturdy yeoman,
And guides his plow-horse over the mead;
It adorns the lovely foot of woman,
And reins the patriot's battle steed

Work on, ye Carriers all;
And let the beam resound;
Work on, joy to the land
Where working-men abound!

The wit and lore of bygone ages,
His labor saves from swift decay;
It guards the Bible's holy pages,
And grasps the follies of the day.

It aids the loom bright imitation
By turning every busy wheel;
It bears the stream to stay the conflagration,
And sheathes the warrior's flashing steel.

Work on, ye Tanner's all;
And let the song go round,
Work on, joy to the land
Where working-men abound.

Source: The Art of Tanning Leather by David H. Kennedy, New Alexandria, Pa.
Chapter 16. 1857.

1858 (1879-1884)

As far back as 1858, the late Professor Knapp brought out a chrome process, but it created little notice in the industrial world, and was regarded as of only chemical interest.

In 1879, Heinzerling patented a form of chrome leather; this, again attracted little attention, and it was left to the ingenuity of August Schultz, of New York, to bring out an idea commercially valuable. His patent was dated January 8th, 1884; and although it has now expired, it has been the subject of endless litigation in America, which always ended in favor of the patentee.

Source: In Part by Alexander Watt. Published by D. Van Nostrand Co. New York, N. Y. p. 324. 1906.

1858

Peterson and Mustard, Tanners

Peterson and Mustard carry on a large and important trade throughout the state of Delaware and the adjacent states, and have room and facilities for a still further enlargement of their already extensive business. Their enclosures are spacious and contain one hundred and forty vats, most of which are now filled with the raw materials in various stages of approximation to leather. Leather in these latter days has become so indispensable an article that its usefulness has passed into an adage. "There is nothing like Leather."

Col. 3.

Source: Delaware Representative. February 25, 1858, P. 3.

1858

William H. and James England have taken the establishment now occupied by George T. Clark, near old Sweede's Church for the purpose of carrying on the leather business. They propose erecting an addition to it and making other improvements.

Source: Delaware Representative. September 9, 1858. Col.3, p. 3.

1858

William Bush, Morocco Manufacturer, Wilmington, Del.

Among the oldest and most extensive morocco manufacturers is William Bush of 114 Walnut Street, who is a descendant of Samuel Bush, who in 1774 founded the transportation line now operated by the firm of G. W. Bush & Sons. The morocco house was established in 1858, by G. T. Clark and Company, who commenced business in a small building now lost sight of in the aggregation of later erections.

Mr. Bush was the silent partner in this firm, but a practical worker and judicious business man, who contributed his full share to the success attained by the house. In 1866 the firm became Bush and Clark and Company, and in 1870 the present style, William Bush and Company, was adopted. The specialty of the house is the manufacture of black morocco, French kid, and maroons of fine and medium grades, made from Capes, Tampico and South American skins. The results of extensive experience, the employment of the most approved methods, and of none but skilled labor, have given the products of the house a high standing in the trade. There is always a ready market for their products at the best prices. The firm turns out from 6 to 7 thousand feet of morocco a

day, which represents the labor of from 100 to 150 men, using the best machinery and appliances. Every modern device calculated to enhance the quality of the goods, or lessen the cost of manufacture is to be found in the establishment. Steam power is supplied by a 60 horse engine. The factory consists of a five-story brick building 70 by 300 feet, with an ell 125 by 200 feet in area, and a further extension of 35 by 80 feet.

Source: Scharf's History of Delaware. Vol. 2, p. 791.

1861

Chapter 167. An Act to Incorporate the Morocco Dressers Union of Friendship and Benevolence, of Wilmington, Delaware. Passed at Dover, February 12, 1861.

Source: Laws of Delaware, 1861-1865. Vol. 12, p. 206.

1861

H. C. Parker, 15 East Third Street, Wilmington, Delaware.

Perhaps there is not an older or more favorably known house of this character in this vicinity than that of Mr. H. C. Parker. The business here was established more than thirty years ago by the father of the present proprietor, who succeeded to the business about six years ago.

The premises are 18 by 52 feet in dimensions, with a shop in the rear.

Harness and saddlery of all descriptions are made to order. A full stock of trunks, valises, bags and horse furniture is carried.

Mr. Parker is the patentee of oil harness soap that has achieved a very large sale throughout a large portion of this country from the middle to the southern states, western states and in every large city generally. When running normally the services of from three to five men are required.

Mr. Parker has been a life-long resident of Wilmington. He is well and favorably known in a social as well as a commercial sense.

Delaware Industries.

Source: / Keighton Printing House. Philadelphia, Pa. p. 280 1891.

1863

Clifford and Walter Pyle have for twenty years conducted a sheepskin tannery on Van Buren Street above Fourth, where in a modest but successful way they have built up a paying business which employs over a hundred hands. Their product is colored leather used by bookbinders and for pocket-books. In 1883 the C. and W. Pyle Co. was incorporated and the business of the old firm was absorbed by it. The Company is now conducting the business.

Source: Conrad's History of Delaware. Vol. 1, p. 392. 1908.

1864

Wilmington, Delaware. Patent Issued

On June 7th, 1864, a Patent for processes for tanning leather was issued by the Government of the United States of America to W. Field and J. Townsend, Wilmington, Delaware.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co. Philadelphia, Pa. p. 610. 1885.

1866

Wilmington, Delaware. Patent Issued

On August 28th, 1866, a Patent for blacking compounds for leather was issued by the Government of the United States of America to N. F. Quimby, Wilmington, Delaware.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co., Philadelphia, Pa. 1885 p. 452.

1866

W. H. Babcock, 206 Market Street, Wilmington, Delaware.

The demand for custom made shoes has been growing less and for some time past, as the shoe manufacturers reach a better class of product. Among the best known houses of this character in this vicinity may be mentioned that of Mr. W. H. Babcock. This business was originally established by the father of the present proprietor about twenty-five years ago. In 1884 he died, and his son then purchased the business, and has since managed it most successfully. Custom work of all kinds is done. Particular attention is paid to careful repairing. Two skilled workmen, one salesman and two salesladies are constantly engaged.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 136. 1891.

1866

W. W. Prettyman, Manufacturer of Harness, Milford, Delaware.

There is no house in this city identified with the harness and saddlery manufacture and trade that takes higher rank than that of Mr. W. W. Prettyman, manufacturer of harness, saddlery and stable supplies.

The business of this concern was founded twenty-five years ago.

This is the oldest and finest harness establishment in the town. The establishment is thoroughly equipped with all appliances pertaining to the business. The salesroom is well appointed, and here are displayed saddles, bridles and harness, as well as novelties in horsefurnishing goods of all descriptions.

The business is conducted on a one price plan, and numbers among its patrons the best people in this section, and horse owners for miles around. In all respects this establishment stands first in its line of trade. Mr. Prettyman is a native of Delaware and a thoroughly practical man.

Source: Delaware Industries. Keighton Printing House, Philadelphia. Pa. P. 45. 1891.

1867

James G. Baker, Leather Manufacturer, Wilmington, Delaware ✓

John G. Baker for 20 years a proprietor of a large leather factory on East Fifth Street near Church. He was a practical leather worker, a man of strong individuality, and with unusual energy and ambition. He began in 1867 in a small way, but in a few years had established a large trade that required an enlargement of the plant. Devoted himself to the production of some special leathers which proved popular, and it was but a brief while until he was a leader in the trade. After a successful career covering several years he met with reverses which clouded his later years. While in the prime of life he died January 28, 1895.

Source: Conrad's History of Delaware. Vol. 1, p. 390.

1867

Morocco Leather Factories, Wilmington, Delaware. ✓

When a map of Wilmington marking the buildings was drawn in 1867, it showed fourteen morocco, kid and leather factories within the city limits. Among these were Charles Baird and Co., John G. Baker, J. Parke Posltes and Co. (later the American Leather Co.), James Mahoney and Co., Beadenkopf and Brother, Washington Jones and Co., W. J. McClain, I. T. Quigley, B. L. Kent and Co., Charles E. Fritz, who all contributed to the industrial wealth of Wilmington.

Source: Wilmington, Delaware: Three Centuries Under Four Flags by Anna T. Lincoln. p. 265. 1937.

1871

J. A. Conner, 4 East Fourth Street, Wilmington, Delaware

Among the best-known dealers in this city may be mentioned Mr. J. A. Conner. He started in business more than a score of years ago, in a much smaller way, and by consistent business management has won his present trade. About seven years ago the present premises were taken. They consist of a large store, some 20 by 65 feet in dimensions, with a basement the same size, used for storage purposes.

A very heavy stock of harness, saddlery and horse furnishings goods are carried, and a specially fine line of trunks, satchels, traveling bags, valises, etc. Pocket-books, card cases and an infinitive variety of small leather ware, perhaps the finest line in the city, is here exhibited.

Special designs in harness and saddlery are made to order, and repairing is neatly done. As many as six capable workmen are some times employed.

Mr. Conner has been a resident of this city for many years, and

has been prominent in public as well as private life, winning the respect of all with whom he forms business, or social relations.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa.
Pp 261, 262. 1891.

1871

C. P. Maroney, 509 Shipley Street, Wilmington, Delaware

Horse furnishings have grown to such perfection in the past few years that but few houses have been able to keep up with the demand for new and attractive styles. Among the most prominent in this section may be mentioned Mr. C. P. Maroney. This gentleman opened business twenty years ago in a much smaller store. The present quarters were taken about seven years ago; the dimensions are 20 by 90 feet, two floors being used. Harness, saddlery, blankets and horse furniture in general is kept. Trunks, valises and bags are also handled extensively. Four capable assistants are employed to further the interests of a substantial patronage.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 200 1891.

1873.

J. R. E. Montgomery, 505 King Street, Wilmington, Delaware.

The shoe and leather trade is well and ably represented in this section of the city by Mr. J. R. E. Montgomery. This genial and courteous gentleman established business about eighteen years ago, and has since been one of the few to be called successful. Boots and shoes of all kinds are kept, from the most substantial to the finest dress shoe.

Custom work and repairing is also done in the best manner, and no means left undone to further the interests of patrons. As a business man, Mr. Montgomery is respected by all, and is recognized as a reliable dealer.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. Pp. 154, 155. 1891.

1873-1875

Wilmington, Delaware. Patents Issued

On Jan. 28, 1873; July 8, 1873; March 23, 1875. Patents for machines used for Pebbling leather were issued by the Government of the United States of America to W. O. Lounsberry, Wilmington, Delaware.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co., Philadelphia, Pa. p. 467. 1885.

1875

Robert H. Jones and William Richman, Leather Mfys. Wilmington, Del

Robert H. Jones and William Richman started in 1875 a small morocco plant on Fifth Street near Orange which they conducted successfully for ten years, when it passed to the control of James Q. Bonner, who still conducts business at the old stand.

Source: Conrad's History of Delaware. Vol. 1, p. 391. 1908.

1875

C. P. Davis, 123 Market Street, Wilmington, Delaware. Shoe and Leather Findings

There are a great number of shoe stores in this city that depend entirely upon home market for purchase of supplies. One of the best

known houses of this character is that of Mr. C. P. Davis. This gentleman has been engaged in this business for the past sixteen years. Three years ago the present quarters were taken. The store now occupied is about 18 by 30 feet in dimensions and fitted in the most commodious manner, and carries a comprehensive line of shoe and leather findings, and supplying the trade throughout this section. This gentleman has every facility for the successful conduct of his business.

Mr. Davis has been a resident of this city for more than forty years, having always been prominent in public as well as in private life. He is respected as an honorable business man in trade as well as social circles.

Source: Delaware Industries. Keighton Printing House, Philadelphia. Pa. p. 76 1891.

1875

Lace Leather

Lace leathers are either tanned, tawed, or made from raw hides, and both these varieties as well as picker leathers which are used for looms, and also for hamstrings, are generally produced in the same tannery. But the variety of lace leather which we shall describe in this chapter, is the lighter kind, which is manufactured usually from Calcutta hides, the heavier variety being made from light cow-hides. When the dry Calcutta hides are used they are first placed to soak in a vat of water, and the time which they remain is dependent upon the weather, one or two nights in warm weather and three or four nights in cold being the usual time.

They are next softened in the hide-mill, the time which they are worked depending upon the manner in which the hides have been cured.

In order to cleanse them from dirt the hides are next placed in the wash-mill and worked for fifteen or twenty minutes, which operation also removes the wrinkles.

Upon being removed from the wash-mill, the hides are spread flat upon the floor and slit down the back, and thus divided into sides. They are then placed upon trucks and carried to the lime vats, where they are spread flat upon the floor alongside the vats and white-washed by passing over them a swab which has been dipped in a solution of lime. This coat of whitewash is applied to the hair side, and the sides are piled two hundred high, and in warm weather this pack remains over night, but in winter the sides are placed in the lime vats the same day, in order to prevent the whitewash from chilling. In warm weather the sides remain in the limes about ten days, but in cold weather the period is longer.

When the hair is loosened the sides are removed from the vats with tongs and immediately unhaired, after which they are placed in water in a vat having a revolving paddle wheel and washed.

As a further preventive against lime, the sides are placed in a large revolving paddle wheel, called a "tub wheel," in which they are washed for about three-quarters of an hour, and upon removal from this wheel the sides are placed in the tanning liquors and remain until tanned. When this has been accomplished the sides are exposed to the air to dry and next stretched, but the stretching is also performed by hand on the stretch-bench.

As is well known, all hides vary considerably in thickness at different points, and when taken from the liquor-vats they are found to be soft, flabby, wrinkled, and full. Owing therefore to this condition of the hides, it is necessary, before they are dressed and

finished for the market, that they be stretched throughout to remove the wrinkles and fullness, and also to reduce those parts which are thicker than other portions, so that as far as possible, the hides shall be uniform in thickness.

Mechanical devices are capable of producing, in connection with hand manipulation, the desirable results of thoroughly stretching the hides, and rendering them of even thickness in all parts. These devices usually comprise, in the main, a friction table or beam, over which the hides are dragged, a stretcher-bar of suitable form for stretching the hides transversely, and a slowly revolving roller, to which the edge of each hide is secured, and around which it is wound after being drawn over the table or beam and the stretcher bar. After the sides have been well worked on the stretch-bench they are split evenly by the splitting machine. The sides are next stuffed with tallow and neat's foot oil, the proportion of which change somewhat according to the temperature and season, less oil and more tallow being used in summer than in winter. The sides are then hung upon sticks in tiers in the drying-room, which is commonly heated by exhaust steam from the engine.

After being removed from the drying-room the sides are softened. The sides are next rolled out smoothly on a glassing machine, and are next shaved on the flesh side and buffed with a currier's knife, in which latter operation the grain is removed in order to prevent the lacing from cracking, about seventy-five sides being a fair day's work for one man. They are then rubbed with a mixture of lard oil, tallow and flour, and the sides of lace-leather are then finished by laying them upon a flat table and smoothing them out with a glass slicker.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co, Philadelphia, Pa. pp. 563, 564, 565. 1885.

1875

Wilmington, Delaware. Patent Issued.

On Jan. 28, 1875, a Patent for machine used for Pebbling leather was issued by the Government of the United States of America to A.M.L. Groff and J. A. Marvel, Wilmington, Delaware.

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co., Philadelphia, Pa. p. 467. 1885.

1876

H. Reedy, Dover, Delaware

The largest boot and shoe house. It was formerly almost impossible to obtain a good shoe ready-made, but owing to many improvements in machinery and stock, it is useless to buy custom-made shoes. Among the large dealers devoting his energies to the sale of ready-made shoes may be mentioned Mr. H. Reedy. This gentleman started business in this city about fifteen years ago in a comparatively small way, but through his activity and energy the trade has however greatly increased, until the business is the largest of its kind in this section. The store is located on Lockerman Street. It is of ample size, and is in every respect fitted in the neatest and most complete manner. A very heavy stock is carried, comprising a large assortment of the best makes of boots, shoes, rubbers and slippers for men, ladies and misses. Mr. Reedy has been a life-long resident of this State, and is widely known as an enterprising merchant.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 29 1891.

1876

J. C. Stuart, Middletown, Delaware

Perhaps in no line of trade has more improvement been made than in the manufacture of shoes, many of the large Eastern makers having greatly increased their capacity and ability to turn out fine work. Formerly it was almost impossible to obtain a good shoe ready-made, but owing to the increased demand for a first-class article, they can now be obtained. One of the principal dealers devoting his energies to this line in this town is Mr. J. Stuart. This gentleman started here fifteen years ago, and has built up a large trade.

The premises are well located in the business center of the town, and are arranged in the most complete manner. A heavy stock is carried, comprising a full line of men's, ladies', misses', and children's boots and shoes, rubbers, slippers, etc., from the most substantial to the most delicate footwear. Repairing is neatly and promptly executed. Custom work is also done in the best manner, the services of several capable workmen being constantly required to further the interests of the trade. Mr. Stuart has, through his long experience in this line, gained a thorough knowledge of the business and the entire confidence of a large number of patrons, who have unimpeachable confidence in his effort to supply a first class article. He has been a life-long resident of Delaware, and is very well known socially and commercially, and respected by the community as a merchant of integrity and business principals.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa.
Pp. 110, 111. 1891.

1876

S. Lloyd Boddy, 3 West Fourth Street, Wilmington, Delaware.

Leather and Shoe Findings, and Manufacturer of Uppers.

There is scarcely another establishment in the city, in this line of trade, doing a larger or better business than that of S. Lloyd Boddy. This gentleman opened business originally in 1876, and has since then by energy and push, built up a very large trade here.

The building occupied is about 25 x 45 feet in dimensions, the upper floors being used as manufacturing departments; these are fitted out with all the latest improved tools and appliances, and no means left undone to foster the interests of the patron.

The stock carried is most complete, comprising everything that would go to make a shoe, all kinds of leather trimmings, buttons, laces, etc. The manufacturing of shoe uppers for the trade is one of the most extensive departments.

The constant services of five skilled workmen is required. Mr. Boddy has been a resident of the city for many years, he has had large experience in this line and is fully capable of supplying the demand of the most fastidious trade, in which he commands respect and confidence.

Source: Delaware Industries. Neighton Printing House, Philadelphia, Pa.
p. 189. 1891.

1877

Rhoads and McComb Company. Leather Mfgs. Wilmington, Delaware.

Allied to morocco and leather manufactories was the Rhoads and McComb Company who began in 1877 at Fourth and Orange Streets, harness and shoe leather manufacturing. Jonathan Rhoads and Thomas McComb constituted the firm, the latter withdrawing in 1887. The J. E. Rhoads and Son's Company moved to Third and Orange Streets in 1889 and then in 1903 to Eleventh street and Grant Avenue. The Rhoads family had been in the leather business since 1702, and their leather belting has a world-wide reputation. The firm is the second oldest in the United States carried on by the same family. John Rhoads came from Derbyshire, England in 1669, and with his youngest son, Joseph, purchased land in Marple Township, then Chester County, Pennsylvania. The son started the tanning business there in 1702. It was successively conducted by son and grandsons until 1869, when Jonathan E. Rhoads moved the tanning business to the western part of Wilmington. The present firm is composed of George A. Rhoads, William E. Rhoads, J. Edgar Rhoads, and Philip Rhoads. Branches are conducted in New York City, Chicago, Atlanta, and Cleveland. The tannery had been used as a leather house for about twenty years by I. T. Chamberlain.

Source: Wilmington Delaware: Three Centuries Under Four Flags by Anna T. Lincoln. p. 268.

1878

Thomas McComb, leather belting manufacturer, 213 Shipley, Wilmington, Del.

Since the introduction of so many new labor-saving machines, the connections of power have to be kept in mind. Among the best known and most practical in this line may be mentioned Mr. Thomas McComb, who has

the very latest improved belting machinery. This gentleman started in business about thirteen years ago. The present large and commodious quarters were obtained three years ago. They are 25 by 100 feet in dimensions, four stories high.

All kinds of leather belting is manufactured and riveted or stitched. Rawhide and patent tanned lacings are also carried in quantities. Harness leather and shoe leather of all kinds are made. The goods manufactured by this establishment are of the highest order, being fully guaranteed. They can be used when the greatest care in transmission is necessary. Ten skilled workmen are employed in the factory.

Mr. McComb is a highly esteemed and well known citizen, and is well known, socially and commercially, as a responsible dealer and manufacturer.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 196. 1891.

1879

J. Mahoney and Company Leather Mfg., Wilmington, Delaware

Jeremiah Mahoney, under the firm name of J. Mahoney and Company, conducted a small business on Third Street near Madison for about five years, beginning in 1879.

Source: Conrad's History of Delaware. Vol. 1, p. 391. 1908.

1880

Beadenkopf and Brother, 1009 Fourth Street, Wilmington, Delaware

Beadenkopf and brother began tanning morocco in 1880. They tanned altogether by the sumac process, employed 45 men, and the tannery has

a capacity of 25 dozens a day.

Source: Scharf's History of Delaware. Vol. 2, p. 792. 1888.

1881

Isaac T. Quigley, Tanner. Wilmington, Delaware. ✓

Isaac T. Quigley started in 1881 at Fourth and Monroe Streets, where for some years previous John Taylor had conducted the same line of business. Charles Mullin afterwards became a partner of Mr. Quigley, the firm name being Quigley and Mullin, but in a few years the firm dissolved, and each partner continued a separate business.

Source: Conrad's History of Delaware. Vol. 1, p. 391. 1908.

1881

Charles Mullen, Front and Monroe Streets, Wilmington, Delaware.

Charles Mullen commenced the tanning of morocco leather in 1881, on the corner of Front and Monroe Streets. He had the largest tannery in the city, consisting of two six-story buildings, one hundred and seventy by forty feet, and one hundred and twenty-two by twenty-eight feet, one five-story building one hundred and ten by twenty-eight, one three-story building, one hundred and twenty-two by twenty-eight feet, and two stories of another building one hundred and thirty by twenty-eight feet.

He employed three hundred men and the tannery has a capacity of three hundred skins per day.

Source: Scharf's History of Delaware. Vol. 2, p. 792. 1888.

1882

F. Blumenthal and Company, Wilmington, Delaware.

After the firm of Quigley and Mullen was dissolved in 1882, Charles Mullen, the junior partner, established a plant of his own at the southwest corner of Front and Monroe Streets. The business continued in his name alone until October of 1888, when Daniel Pierson, Jr., was admitted as a partner. Mullen remained in the firm only three months longer, disposing of his interest to Daniel Pierson, Jr., in January 1889, and the latter continued the business until January, 1891, when the entire interest was sold to Ferdinand Blumenthal and Julian Ulman, trading as F. Blumenthal and Co. The latter firm has since continued the business, and it has been extended to meet their wants until the plant covers the whole two blocks of land extending from Front to Chestnut Streets and from Monroe to Adams. The equipment of the plant is unexcelled in the country, the products of the firm are known everywhere, and no establishment in the United States has a larger output. Daniel Pierson, Jr., continued as manager for the Blumenthals until 1893. He was succeeded in that year by Richard Patzowsky, under whose management the business was conducted until 1900, when he resigned. His successor as a manager was Joseph H. Blatz, who served for about two years, meeting an untimely death in 1902 by a railroad accident. Since that time the management of the business has fallen to William C. Blatz and John B. Blatz, men of younger years, but by dint of good judgment have been able to maintain the good management of their predecessors. The firm gives employment to hundreds of people, and is reckoned one of the most prosperous and enterprising of the Wilmington manufactories.

Source: Conrad's History of Delaware. Vol. 1, p. 387. 1908.

1882

J. T. Stoops, Sixth and Delaware Streets, New Castle, Delaware

A manufacturer of harness. The importance of such an establishment as this can readily be seen by all persons who will give the matter a moment's consideration. Perhaps the largest and best house of this nature in this section of the country is that of Mr. J. T. Stoops. This gentleman opened the business in this city about nine years ago at Sixth and Delaware Streets, and one year ago came to the Opera House Building.

His premises here consist of a commodious store in that building. It is well fitted in the most attractive manner, with every convenience tending toward the betterment of business. A very heavy stock is carried, comprising a large and complete assortment of all kinds of building and shelf hardware, cutlery, pocket and table goods, tools, guns, sporting goods and ammunition, and without a doubt the finest line of hardware and agricultural tools in this section. All kinds of horse furnishings are also kept, harness and saddles of every description made to order in the best manner, single and double, mounted and plain harness. A specialty is made of trunks, satchels and leather goods, wall papers of all kinds and varieties constantly being kept in stock, lamp and lamp goods, fancy brackets, wall ornaments, wood moulding, etc. Mr. Stoops is a native of this state, and has become very widely known and respected by a large community in this district.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa.
p. 57. 1891.

1883

Prettyman Bros., Loockerman Street, Dover, Delaware

It was formerly almost impossible to obtain a good shoe ready made, but owing to the many improvements made by the manufacturers the best quality of shoes can now be purchased ready-made.

Among the larger and finest shoe stores in this town is that of Prettyman Bros. These gentlemen started business here about eight years ago, and have been most successful, due to consistent business methods and a fine line of goods. The store is located on Loockerman Street, it is of ample size, and is in every way fitted in the most attractive manner. A heavy stock of boots, shoes, rubbers, slippers and foot wear generally is carried for ladies, misses, children and men's wear, from the most substantial brogan to the finest slipper. Custom work is also done in the most careful manner, this department is supplied with the requisite and skilled workmen. The individual members of the firm are Charles B. and Clarence Prettyman, both of whom are fully familiar with this branch of commercial pursuit, and thus capable of supplying all demands that may be made upon them. Since founding here they have won the esteem of a fine, substantial trade, and are recognized reliable dealers.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa.
p. 30. 1891.

January-8-1884

Tawing Hides and Skins, Patent to Augustus Schultz, New York, N. Y.

Patent number, 291-784-January-8-1884-Filed May 31, 1883. No Specimens

Claim-The within-described process for tawing hides and skins, said process consisting in subjecting the hides or skins to the action of compounds of metallic salts-such as a solution of bichromate of potash, and then treating the same with a compound containing hyposulphurous acid, (or as it is otherwise called "thiosulphuric acid), such as a solution of hyposulphite of soda or of potash in the presence of hydrochloric acid.

1884

Source: Official Gazette of the United States Patent Office. Vol. 26, /
p. 174. January 1, to March 25, inclusive, 1884.

January 8, 1884.

Tawing Hides and Skins, Patent to Augustus Schultz, New York, N.Y. 1884.

Patent number 291-785-January-8-1884-Filed July 18-1883. No Specimens.

Claim-The within-described process for tawing hides and skins, said process consisting in subjecting the hides or skins to the action of a bath prepared from a metallic salt-such as bichromate of potash-and then to the action of a bath capable of evolving sulphurous-acid, such as a solution of sulphite of soda-in presence of another acid-such as hydrochloric acid-substantially as described.

1884

Source: Official Gazette of the United States Patent Office. Vol. 26. /
p. 174. January 1 to March 25, inclusive, 1884.

1885

Morocco Leathers

By morocco leather we understand that soft, pliable material so largely employed in the manufacture of the upper of ladies' and children's shoes, and men's low cut shoes, and which also finds various secondary employments, such as bindings for books, linings for travelling bags, toilet cases, pocket books, etc. The finer grades of morocco leather are produced from goat-skins, but an inferior quality is obtained from sheep-skins, and split of calf-skins. The usual commercial classification of morocco leather, produced in this country, is:

Imitation of French Kid	Pebbles
Brushed Kid	Straight-gained goat
Oiled Goat	Caracol or straight calf
Pony-glazed kid	Siamang (a black gibbon)
Glazed Kid	

The goat-skins employed in this country for the manufacture of morocco leather, are classed as follows, and rank according to their position in the list:

Curacoa	Russians
South Americans	Capes
Madras	Arabians
Tampico	Macedonians
Patnas	Angora
Mochas	Albanians
Kassan	Magadores

Source: Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co. Philadelphia, Pa. p. 524. 1885.

1885

Wilmington Oil and Leather Company, Wilmington, Delaware.

Wilmington Oil and Leather Company, engaged in 1885 in the manufacture of porpoise leather production, one of the most novel and interesting industries of the city. It was introduced recently by the Wilmington Oil and Leather Co., who, recognizing the possibilities of wealth that lay in the fat and skin of the plump and playful porpoise, organized in 1885 a stock company for the purpose of rendering those parts useful to mankind, especially that portion of mankind included in the company. At first they had a plant located on an island off the South Atlantic Coast, but for the better operation of the business a factory was established in Wilmington, at Lord and Church Streets. This is a four-story building, of good size and proportions, provided with steam power, and all necessary machinery, some of it of a peculiar nature, adapted to the handling of this new kind of leather. This leather is of three kinds, or qualities; first, the true porpoise, so called to distinguish it from the skin of the North sea porpoise; second, the porpoise calf; and third, the porpoise kid made from the skin of the infant animal. Great merit is claimed for the porpoise leather, among the leading qualities imputed to it being its toughness, pliability, impervious to water, smoothness, and durability. The company has about 75 men fishing for porpoises at the island alluded to, and quite a number at the factory here. They manufacture a lubricating oil from the fat of the porpoise, and a fine clock and watch oil from the creature's jaw.

Source: Scharf's History of Delaware. Vol. 2, p. 792-793.

1885

Hides and Skins, Imports

Besides the domestic hides, large quantities are imported from the East and West Indies and from the Cape, but especially from South America. From the East and West Indies we receive light dried bullock hides, called kips, which possess a greater or smaller value. Dried kip skins freed from flesh and prepared with arsenic are also brought from Java, the East Indies, and other places.

Calf-skin is a principal material for the manufacture of upper leather for shoes and boots, and is also much used for book-binding. This leather, notwithstanding its comparative thinness, excels in strength and flexibility, and for this reason brings a comparatively high price. The German, and especially the Bavarian calf-skins, are much in demand. Dried calf-skins are imported from the East Indies and from South America.

Sheep-skins are used for a lower grade of bookbinding, for bellows, whips, aprons, cushions and seat covers, linings and bindings of boots and shoes, gloves, leggings of different kinds, and sometimes for trunks. When tanned in oil, sheep-skins form a good imitation of chamois leather, and at times they have been tanned with Sumac and largely used for the imitation of morocco of all kinds; this was especially so during the American Civil War. Sheep-skins and split calf-skins are also employed to manufacture imitation of French kid and other varieties of morocco leather. Lamb-skins of very young animals, being of even thickness and possessing a fine and delicate grain, furnish an excellent glove leather. The products which goat skins yield are beautiful in texture, of great value, and of varied usefulness. Goat-skins are obtained mostly from the East Indies, the Cape, North Africa, South America, Mexico, Asia-Minor, and the hilly regions of Europe, and form the most

desirable material for morocco leather and gloves, and are extensively manufactured into blackened grain leather for uppers of ladies' shoes. Besides Swiss goat-skins, which are in special demand on account of their smooth grain, those from Mexico are also especially distinguished by their size and strength, being superior in this respect to those of the East Indies. Horse-hides and skins of the ass, zebra, quagga, etc. have in modern times become very important raw materials for leather. These hides are sometimes used as a substitute for those of cattle, and persons who are not acquainted with leathers probably unsuspectingly purchase articles made from this material. Boot-makers, of late, sometimes in large cities, make a specialty of producing custom-made stock from this material; they so advertise it, and do not fail to find customers, in fact there are now a large number of men who much prefer it, and will accept nothing else.

Leather made from horse-hides is also sometimes desirable and useful for the manufacture of horse-collars, but for this purpose also the tanning should be intelligently done, otherwise it will form galls and blisters on the necks of the animals wearing them. Seal-skins obtained from Alaska and other Arctic regions are of great value for fur, and deprived of it, form a tough but porous leather, and "blackened on the grain"; it has of late, been used for the manufacture of light summer shoes.

Common seal-skins are partly tanned with the hair, and used in that state for the manufacture of travelling bags, caps, aprons, and portfolios, are sometimes made from these skins. Dog-skin is thin, tough, and valuable, and is good for the purpose of making gloves. Porpoise skin works into a soft, strong, and very durable leather, and is largely used as ties for men's heavy shoes. Hippopotamus and elephant hides yield a great thickness, when tanned resembling a board, and are used

for buffing wheels in cutlery manufacture, and in construction of implements used for beetling in bleaching and washing cotton and woollen goods.

Alligator skins have for thirty years been tanned into leather, and have formed an item in the trade lists of this country, and the leather is now being much sought after in European markets. Buffalo-hides are tanned like ox hides, but make an inferior quality of sole leather. When tanned in a particular way with oil, they constitute what is termed buff-belt leather, which is superior to the similar article made of cow-hides.

Deer skins are manufactured in large numbers into chamois leather, also into glove leather.

Shark and rhinoceros-skins also find their way into the vat of the tanner and into the market.

Source: Manufacture of leather by Charles Thomas Davis. Published by Henry Carey Baird Co., Philadelphia, Pa. pp. 40, 41, 42, 43, 44, 45. 1885.

Note: Quagga means a South African wild ass. Webster's Dictionary.

1885

Alligator Leather

At present the most fashionable material for small valises, satchels, pocket-books, cigar cases, etc., is the skin of the American alligator, and in addition to uses enumerated it is also used for uppers of ladies and gentlemen's shoes. In all the Gulf States, from Florida to Texas, these sauroid fish are hunted to supply the demand.

Alligator leather has been in vogue for a long time; but during the past five years the slaughter of the alligator has been prosecuted with

with great activity. These skins are usually packed for shipment in barrels and are green salted, and if the skins are allowed to remain too long in the barrels they become heated and the grain sides thereby so injured that the skins have to be finished into second class leather. Only the skin from the belly and sides is used; the back with its heavy coat of scales is cut out and thrown away as worthless.

All the skins show great uniformity, being of a bluish black hue on the sides and a peculiar bluish white under the belly, and each skin is curiously checkered in oblong divisions, which being separated by interesting grooves, and wrinkled, give the peculiar appearance seen in all alligator leather. The trade in these skins receive them of all sizes from three feet up, the average prices paid at New Orleans, La., for these skins ranging from fifteen cents each for the smallest to about one dollar for the largest. The skins most in demand are about seven feet long.

The skins of the monster alligators ranging from ten to fifteen feet long are not much desired. Under the continual destruction of alligators the supply is rapidly diminishing, and it is now but a question of a few years when it will be impossible to obtain these skins at a price that will justify their general employment. To supply the demand for cheap articles, imitation alligator leather is now being largely produced.

The alligator leather of this country and the kangaroo leather of Australia are similar in the respect that they both depend upon wild animals to supply the material for their manufacture, and the business is therefore to some extent precarious. At the place of shipment the skins from young, middle-aged and old alligators are thrown promiscuously into barrels, and the first step when the skins arrive at the tannery is to assort the small and medium sized from the larger ones, which are

kept separate. The skins are then thrown into vats containing clear cool water, and in these soaks the smaller skins remain about two days and the large ones four days. They next go into vats of lime, which should not be so strong as for depilating hides or skins, and in the limes they remain from eight to fourteen days, according to the size of the skins. Each day the skins are reeled into stronger lime, great care being observed not to rot the tender portion of the skins during the swelling.

The bate of hen manure, into which the skins next pass, is made quite weak, and in this bate the skins are gently agitated by means of the usual England wheel, the period for which they remain from ten to fifteen hours according to the size of the skins. They are next cleansed in a wash wheel, and then thrown into a vat containing hemlock liquor of about 4% strength, and every other day the skins are shifted into strong liquor until at the end of about twenty-days it has been increased to about 20% strength. A gentle agitation of the tanning liquor during the last twelve days is very beneficial, as it aids in the more thorough tanning of the skins, and prevents the settlement of the sediment of the liquor into the creases of the skins, which is liable to rot the tender portions, especially those of young alligators. After being subjected to the tanning process just described, the skins are hung in the open air to harden. They are then carried into the finishing room, and eight or ten skins are piled one upon top of the other and placed in a clamp, the flesh side of the skin being uppermost. The flesh sides are then softened by the operator with a tool, the object being to throw up the rougher portions, which are then lightly cut off with a currier's knife. If the skins are intended to be manufactured into upper leather, they are again placed in the tanning liquor of 8 or 10% strength, and in this they remain for six or

eight days, during which period they are gently agitated.

After being removed from the final tanning liquor the skins are scoured by hand on a slate table, first on the flesh, and next on the grain side, the tools used being the scouring brush, stone and slicker. After being scoured the skins are placed in the air to harden, and when not quite dry they are carried into the shop and stuffed by hand, tallow, fish oil, and a small quantity of rosin being used. They are next "set out" and then are carried to the finishing room and blackened on the grain side with a preparation of logwood and copperas. They are next glassed by hand, and if a gloss is desired they are "pasted over the black" and hung up in the finishing room to dry over night. In the morning the skins are re-glassed, and immediately finished by gumming them over on the grain side with a preparation of gum tragacanth, and are then measured and ready for market. The skins not intended for the manufacture of upper-leather are not bleached, but are finished in their natural color, which is yellowish-brown, and are used for satchels, pocket books, etc.

Source: The Manufacture of Leather by Charles Thomas Davis. Published by Henry Carey Baird Co., Philadelphia, Pa. pp 582 to 585. 1885

1885

Gallaher, Kitselman and Fox Shoe Mfys. Wilmington, Delaware.

Gallaher, Kitselman and Fox manufactured shoes on quite a large scale under the firm name of Gallaher, Kitselman and Fox at Third and Orange Streets, Wilmington at that time, with all the variety in its manufactories, had no shoe house for several years until this one was set in operation in 1885. It was at first carried on by Barnett, Gallaher & Co., but the firm was organized as it existed on January 1886.

About 35 men are employed besides those who act as salesmen. Steam power is employed and operates the latest improved machinery. The goods produced are ladies, misses and children's fine shoes, and the specialty of the house is the Eclipse shoe, said to possess the maximum of merit for the minimum of cost. The market of the house is chiefly in Delaware, Maryland and Pennsylvania, and it also extends westward.

Source: Scharf's History of Delaware. Vol. p. 793.

1885

Selecting Hides and Skins

Considerable difference is absorbed in the thickness and quality of the skins of various animals, even in those of the same class, owing to circumstances connected with the food age, variety of breed, the state of health, and the period of the year when they are slaughtered. Thus, large oxen are well known to afford hides which are tanned into thicker and heavier leather than bulls or cows, especially if the latter be old and have had many calves. Bull hides are coarser-grained and thinner on the back than those of oxen and heifers, or young cows, but much denser in the neck and parts of the belly. It would also appear that when cows have repeatedly calved, the skin becomes distended and thinner, and does not therefore afford as heavy a sole-leather as that of younger animals. Again, hides of animals dying in a state of disease, are found to be much inferior to those of healthy ones of the same class, although the apparent difference is not very marked before tanning.

No very definite criteria are known to guide the purchaser in distinguishing the quality of hides and skins. If the hide be thin, flabby, soft, and will not bear handling, then such a one will not make good leather; but should it present the opposite quality, it may confidently

be expected to be a good article.

It has been remarked of sheep, that the finer wool varieties have inferior skins; also that the skin gains in thickness and quality considerably in the course of a few days after shearing.

The proper selection of skins, according to size, thickness, and strength, which decide the value of a hide for the preparation of certain varieties of leather, is a difficult problem for the manufacture, there being not only great difference in the various kinds of hides, but also great inequalities in those of one species, according to the sex and age of the animal, and the manner in which it has been fed. Many breeds of cattle furnish, for instance, hides possessing a certain thickness towards the sides, while those of others are thinner, or, as the tanner calls it "fall off towards the sides."

In commerce, a distinction is made between hides and skins, as has been stated, though it is not sharply defined as it depends simply on the thickness of the materials.

In the buying and valuation of hides the following principal points are generally taken into consideration. Thin hides, of unequal thickness, are of less value than full and even hides. Young hides are preferable to old ones, as the fibre in the latter is generally thicker and less flexible. Hides of animals having died from contagious diseases should be entirely rejected, or at least handled with the greatest care. Many a tanner has suffered sickness, or even lost his life, by careless handling of hides derived from animals afflicted with inflammation of the spine. The poisoning, as is well known, is effected by the transmission of a fungus (*Bacterium anthrax*) which, when placed upon abrasions of the skin, produces malignant carbuncles, which in most cases are fatal, if help is not quickly rendered. Besides the bacterium anthrax,

there are other infectious substances which may produce blood poisoning.

Source: Manufacture of Leather by Charles Thomas Davis, published by Henry Carey Baird Co., Philadelphia, Pa. pp. 47, 48. 1885.

1885

Fred Blome, Middletown, Delaware

Mr. Blome is a native of Germany, and is a thoroughly experienced man in this business of boots and shoes. He established himself at the present address on Main Street, five years ago, and has met with a very liberal patronage. He has been for fourteen years a resident of Delaware and is well thought of throughout the town. All kinds of repairing and ordered work for men, women, and children's foot wear is executed in a workmanlike manner. His facilities for meeting the demands of the trade are of the best character, while his prices are extremely reasonable. Mr. Blome is a member of the Annual Benefit Society, and a thorough practical workman, experienced in his line of business, sparing no pains to give entire satisfaction to his many patrons.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 110. 1891.

1886

Ford and Ryan Co., Morocco Manufacturers, Wilmington, Del.

Ford and Ryan Company, on Webb Street, between Second and Third Streets, have a brick building 6 stories high, 40 by 140 feet in dimensions, erected in 1886, in which are employed 105 hands that turn out 150 dozens of goat skins, morocco tanned per day. Most of the tanning was done by the sumac process.

Source: Scharf's History of Delaware. Vol. 2, p. 792.

* * *

1886

B. L. Kent and Company, Wilmington, Delaware.

B. L. Kent and Company in 1886 established a morocco tanning plant with a capacity of thirty dozens skins a day. The firm was located at Front and Justison Streets, where they also carried on a lumber business.

Source: Conrad's History of Delaware. p. 391, Vol. 1. 1908.

1887

John Fleming, Delaware Street, New Castle, Delaware

Formerly it was almost a necessity to purchase custom made shoes, but at present, through the efforts of many of our large manufacturers, the quality of ready-made shoes has been bettered.

Among the dealers devoting their energies to this line we may mention Mr. John Fleming. This gentleman started in business here about four years ago, and has by ability and energy built up quite a large trade.

The store is located on Delaware Street. It is of ample size and is in every respect first-class. A large stock is carried, comprising a carefully selected assortment of boots, shoes, and slippers for ladies, misses, children's and men's wear. A specialty is made of rubbers, shoes and boots of all kinds. Particular attention is paid to custom work of all kinds and repairing, a workman being constantly employed in this capacity. Mr. Fleming has become very well known in this section, and is highly esteemed by all who have ever had any transactions with him for his integrity of purpose.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 66. 1891.

Leather

1887

Morrow Brothers, 115 Market Street, Wilmington, Delaware.

There is scarcely a better known establishment of this character in the vicinity than that of Morrow Brothers. These gentlemen started business about four years ago and have thus far been most successful. The premises occupied, consist of a store about 20 by 30 feet in dimensions, it is nicely fitted and furnished in the most commodious manner. Boots, shoes, rubbers and brogans for men's wear are kept. Fine shoes made a specialty of. The assistance of three capable persons is constantly required.

The members of the firm are Messrs Robert and James Morrow, both gentlemen having had large experience in this line, are in every way capable of supplying the demands of the most particular customers, and are respected in trade circles as responsible dealers.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa.
p. 75. 1891.

1888

S. L. Truss. Boots and Shoes. New Castle, Delaware.

In no line of trade have more improvements been made than in the manufacturing of shoes. Formerly, it was impossible to obtain a first class shoe ready made. But to-day many establishments carry large and complete selections of choice foot wear. Among the most favorably known dealers in this city may be mentioned Mr. S. L. Truss.

This gentleman started business here about three years ago, and has, through his energy and ability, built up quite an extensive patronage.

The store is well located on the main thoroughfare, and is in every respect first-class, a large and complete stock is carried, comprising a full selection of men's, ladies', misses' and children

Industry and Commerce
Leather

boots, rubbers and slippers, from the best makers. Footwear may be had from the most substantial working shoe to the finest delicate house slipper. A specialty is made of rubber boots for gunning and fishing.

Mr. Truss has been a life-long resident of this city and is very well and favorably known, both in business and social connections. As a business man, he is respected as a responsible dealer and wins the good will of a select trade.

Source: Delaware Industries. Neighton Printing House, Philadelphia, Pa. p. 63 1891.

1889

John McVey, Front and Market Streets, Wilmington, Delaware.
Boots and Shoes.

In this section of the city it would be hard to find a more favorably known establishment than that of Mr. John McVey. This gentleman opened business about eight years ago, at 14 East Front Street, and came here August 1889, and from the inception, received every assurance of success.

The store is about 23 by 58 feet in dimensions, fitted in a most commodious manner. A very large stock of boots and shoes is carried, all styles and kinds for men, ladies and children are being sold. The trade is wholesale as well as retail, extending over a large portion of the state. Mr. McVey has been prominent in public as well as business life, having been chosen by his admiring fellow citizens to represent them in the City Council.

Source: Delaware Industries. Neighton Printing House, Philadelphia, Pa. p. 74. 1891.

1889

Solomon Burstan, Middletown, Delaware

Among the many business enterprises which have centered themselves and seem to move on with a prosperous look may be mentioned the establishment of Mr. Solomon Burstan, of Main Street, who has been in business in this present location for over a year. This place being of ample size for the display of clothing of all kinds and description for men and children, all styles and quality may here be found, also a line of men's, children's and ladies' shoes. Making a specialty of repairing and order work, this department is equipped with all the facilities for the business. Being a practical shoemaker, the proprietor is kept actively at work repairing and making shoes for the many who have found his work to be always satisfactory.

Mr. Burstan is a native of Roumania, which is in Central Europe, and had been engaged in business in Philadelphia for seven years previous to his arriving at Middletown.

His trade here is steadily increasing, and by honest industry and energy may be classed among the better business men of this section.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 98. 1891.

1889

W. R. Reynolds, Middletown, Delaware.

Among the establishments that have been opened in this vicinity during the past year, there are none that give promise of more success than that of Mr. W. R. Reynolds. This young gentleman started here in May last and has already accumulated quite a large and select trade, due to consistent business principals and a fine line of goods. The premises are well located on one of the main business thoroughfares of the town.

-1889

W. R. Reynolds

They are of ample size, the first floor being used as a show room, while the upper is devoted to manufacturing purposes. This department is equipped with all the tools and appliances requisite to pursue this branch of trade.

A very large and complete stock of horsefurnishings goods is carried, comprising all styles and kind of harness, both single and double, mounted and plain, saddles, blankets, robes, boots, as well as accessories, soap, wheel grease, etc. Particular attention is paid to repairing and special orders of every description, all work being neatly and promptly executed. In addition to the above lines, Mr. Reynolds also deals in carriages, buggies, and phaetons of the newest styles. He has become familiar with the above lines, and is a competent judge of all goods of this description, and is thus enabled to supply the finest trade. He is very well known in this community, having resided here the greater portion of his life, and as a business man commands the confidence and goodwill of the community.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa.
p. 105. 1891.

1889

J. Will Perkins, 101 West Eighth Street, Wilmington, Delaware.

Among the best known and most prominent houses of this character in this section of the city may be mentioned that of Mr. J. W. Perkins. This gentleman established business here about two years ago and has met with much success. The store is about 16 by 50 feet in dimensions, with the workshop in the rear.

The manufacture of harness and saddlery of all kinds is carried on, and a full stock of horse furnishings, trunks and valises is carried. Several capable workmen are given employment.

Source: Delaware Industries. Keighton Printing House, Philadelphia, Pa. p. 240. 1891.

1890

Edwin Prettyman, Middletown, Delaware

One of Middletown's finest and most popular shoe houses is that of Mr. Edwin Prettyman, of Main and Broad Streets. This gentleman confines himself to the handling of boots and shoes of the finest grades for both sexes, and has won widespread popularity by his enterprising and honorable methods. Mr. Prettyman founded his business in March 1890, and from the outset, his career has been a prosperous and progressive one, until it is now the largest shoe house in town, due to consistent business methods and a fine line of goods.

The store presents a bright, tasteful and inviting appearance, the arrangements and furnishings being of a superior character for securing the convenience of customers, and the ample and effective display of the goods carried in stock is large and carefully selected, embracing goods from the most durable brogan to the finest slipper; every description of footwear, boots, shoes, slippers, rubbers, gaiters, etc.

The goods are fixed at prices to secure quick sales and the business is brisk.

Mr. Prettyman is a native of Delaware and well thought of by his patrons and friends. In trade circles he is regarded as a reliable dealer.

Source: Delaware Industries. Keighton Printing House, Phila. Pa. p. 111, 112 1891.

1891

George D. Cleland, 424 Market Street, Wilmington, Delaware

By all odds the finest store in this city devoting its energies to the sale of boots and shoes is that of Mr. George D. Cleland. This gentleman opened business here some time ago, and from the inception has met with every possible success. The store is about 20 by 60 in dimensions, and is furnished in the handsomest manner, with two large bulk windows in the front for the display of goods. A very choice collection of fine shoes is carried for gentlemen, ladies, misses, and children. A specialty is made of fine custom work. The services of three skilled operators is constantly required. Mr. Cleland has been a resident of the city for many years, and having had many years' experience in this line, is fully capable of supplying the demands of the most fastidious.

Source: Delaware Industries. Neighton Printing House, Philadelphia, Pa. p. 127. 1891.

1892

Garrett and Barr, Tanners, Wilmington, Del.

The City of Wilmington has long been a central market^{of} the United States for leather and leather goods, and the home industry now competes with that of France. Garrett and Barr purchased part of the old morocco factory of William Bush & Co., in May 1892, and began the manufacture of glazed kid of a combination tannage, and built up a fine growing trade with manufacturers and jobbers throughout the United States and Canada. Their product compared favorably with any goods of their class for appearance and wearing qualities. They occupy five floors 40 by 90 feet with a wing of 50 by 90 feet, fully equipped with improved machinery and ample steam power, and give steady employment to from forty to sixty

skilled hands. The productive capacity of the factory is one hundred dozens a day, the product is in preferential use by leading manufacturers in the important centers of the country. All their goods are sold at the factory, and orders of whatever magnitude are filled with promptness and on the most favorable terms. A. H. Garrett and W. A. Barr are natives of Wilmington, were connected with the old house of Wm. Bush & Co., for twelve and five years respectively, and are members of the National Morocco Manufacturers Association.

Source: History and Commerce of Wilmington, Delaware, by A. F. Parsons, Publishing Co. p.54. 1894

1894

Wilmington, Delaware

In 1894 there were the following important morocco manufacturers in Wilmington. These include the following: American Leather Co., Charles Baird and Co., John G. Baker, Beadenkopf and Brother, William Beadenkopf, F. Blumenthal and Co., W. B. Clerk and Co., The Ford Morocco Co., Charles E. Fritz and Co., Garrett and Barr, W. Jones and Co., William J. McClary, Mitchell, Tadman and Thomas, I. Trimble Quigley, and Wilmington Morocco Company.

Source: Every Evening History of Wilmington, p. 58. 1894.

1894

Wilmington, Delaware

Boots, Shoe, Custom work and Repairing

Establishments reporting, 94. Capital \$55,111; miscellaneous expenses \$8,655. Employees 136; wages \$57,913. Cost of material used, \$33,929; value of product, including receipts from custom work and repairing, \$110,135.

Source: Every Evening History of Delaware. Page 58. 1894.

1895

Wilmington and Brandywine Leather Co., Wilmington, Del. ✓

In 1895, a year after the retirement of Robert W. Tadman from the firm of Mitchell, Tadman and Thomas, he formed a partnership with James B. Hickman, under the firm of Tadman and Hickman, and began the manufacture of fancy glazed kid at 208 West Fourth Street, the old stand so long occupied by Stephen Postles and J. Parke Postles. James B. Hickman had been for years with John G. Baker, and Robert W. Tadman had been raised in the leather trade. The firm soon built up a large business. In 1901 the Wilmington and Brandywine Leather Company was incorporated and the business of the old firm was absorbed by it and continued at the old stand. The present officers of the company are Robert W. Tadman, president; George F. Lowry, vice president and secretary; and James Hickman, treasurer.

Source: Conrad's History of Delaware, vol. 1. 1908. p. 389.

1897

Morocco and other Leather

In the manufacture of light leathers, Wilmington has no occasion to take a back step from the rank and file of manufacturing interests here or other points in the United States. Here is located the largest morocco plant in the world, and several others that crowd a neighboring city for honors in quantity of production. It is a pleasing fact to state that a ready market is found, not only in this country but in foreign ports. There is really no poor leather made here, the special feature of pure water, which is used in the manufacture, giving to our product a uniform excellence. Aside from morocco, there is manufactured

a superior grade of patent leather, which meets with ready sales on both Continents, and the factory is kept busy the entire year. Patent process is in use in producing morocco, which, aside from standard, has been invented by several of our local firms, and is used exclusively by them to the betterment of their purse by reason of the demand for their product. Wilmington leather manufacturers have kept up with the march of progress, and it is just possible that she will be the morocco mart in a not far distant future. From the medium to the highest grades are made, and the capital invested is \$5,760,000. Leather and rubber belting is made here in considerable quantities.

Source: Industrial Wilmington by George A. Wolf, Wilmington, Delaware. 1898. pp 55-56.

In 1899 the Ford Morocco Company granted its employees a raise in pay from ten to twenty per cent.

Source: Sunday Morning Star, April 16, 1899. Page 33.

1900

Elsmere, Delaware, New Castle County.

Elsmere, about one and one half miles from Wilmington had a tanning company in the year 1900.

Source: Bevan's History of Delaware. Vol. 2, p. 800. 1929.

Wm. J. Sutherland
October 9, 1939

VI
1901

Industry and Commerce
Leather

CURRENT FILE

Leather in Delaware in the 20th Century

New Castle Leather Manufacturing Company, Wilmington, Delaware

This company was organized in 1901 by Richard Patzowsky, Gustave Binger, formerly of Shattuck and Binger, a New York jobbing house, and Sidney New, the New York representative of G. Levor and Co. It was originally a partnership of Patzowsky, Binger and New, but using the above corporate title.

Richard Patzowsky, a Bohemian immigrant, was for a number of years superintendent of the Blumenthal and Company tanneries in Wilmington, but resigned in 1900 to establish his own business. J. Wirt Willis, a much younger man than Patzowsky, was also an employee in a minor capacity of Blumenthal's, but had left them a year or two earlier to enter another field. When Patzowsky started the new venture, young Willis was the first person he called upon to organize the new tannery. Patzowsky died in December of 1916 and Mr. Willis was fully able to take charge of the tannery and as late as 1938 was still active in the business. Gustave Binger was the junior partner of an old established and reliable firm of jobbers in leather and shoe findings located at 20 Spruce Street, just on the edge of the famous Swamp district in New York City. Robert Binger is his son. The company's tannery was located in Wilmington, centering around 11th and Wilson Streets, and the first building occupied the entire block from 11th to 12th Streets and from Wilson to Poplar. Later the plant was extended until finally it occupied parts of eight city blocks extending from 10th to 14th Streets, both sides of Wilson Street and along Poplar Street, with a daily capacity of from 1,200 dozen to 1,500 dozen, depending upon the size of the skins worked.

Prior to the World War, about 65% of the company's product was exported but when the war killed that outlet the company had no difficulty in finding a domestic market for its leather (glazed kid) which had many recognized and desirable qualities. For years the tannery was operated at capacity and on a profitable basis.

This company was one of the earliest producers of colored kid, ever alert for new and improved methods and was probably the first kid tanner to change from the age-old lime process to the "arazym" method of unhairing.

In 1919, the company was incorporated with Robert E. Binger as President, Sidney New, Treasurer, and J. Wirt Willis as Vice President. The President and Treasurer were located at New York and Vice President Willis was in charge of the tannery with Carlton T. Bridgham as Auditor and office manager. This organization continued until the death of Mr. New in about 1930. In June of 1933 the Company was merged with the Allied Kid Co., Messers Binger and Willis becoming vice presidents of the enlarged company. The company prior to 1917 had made plans for considerable expansion and despite those troublesome years proceeded to carry out these ideas and erected a 10 story office building at 100 Gold Street, New York City, and in Wilmington a large raw stock warehouse at 14th and Poplar Streets and storehouse for supplies and machine shop at 12th and Wilson Streets, and a three-story Administration Building at 11th and Poplar Streets. The company was very hard hit by the depression of 1930 and the years following which resulted in the above mentioned/^{merge} of 1933.

Compiled by Carlton T. Bridgham.

1902

C. Wesley Weldin, Wilmington, Delaware

C. Wesley Weldin operated a morocco tannery on Conrad Street between Adams and Jackson Streets from 1902 to 1904. The building erected by William Beadenkopf had been idle for some years, when Mr. Weldin began business there in 1902. After continuing for two years, Mr. Weldin sold his plant to Clarence M. Beadenkopf, who continued there but a short time when he sold out to George F. Betz who continued manufacturing there.

Source: Conrad's Hist. of Del. Vol. 1. Page 392. 1908.

1908

The Beadenkopfs

William, Charles, and Martin Beadenkopf have at various times under various firm names been connected with the leather trade in Wilmington for the past thrity years. The factory on West Fourth Street near Jackson was built by them, and is now conducted by Charles Beadenkopf. Later they operated on Conrad Street near Jackson, and within a few years William Beadenkopf bought the old plant used by the Diamond Match Company at Fourteenth and Walnut Streets, and has been conducting a leather factory there for the past five years. All three of the brothers have shown an aptness for business, and it is unusual to find three brothers who have^{have}/so successful in business life.

Source: Conrad's Hist. of Delaware. Vol. 1, Page 391. 1908.

June 26th, 1913

Wilmington, Delaware

An ordinance providing for the measuring of leather.

Be it ordained by the Council of Wilmington.

Section 1. The Mayor may, immediately upon the approval of this Ordinance, appoint one or more persons as a measurer of leather for the City of Wilmington, and the person or persons so appointed shall hold office during the pleasure of the Mayor.

Section 2. It shall be the duty of a measurer of leather to measure leather truthfully, honestly, and to the best of his or her ability, and for that purpose a standard measuring machine or frame recognized by the trade shall be used.

Section 3. All leather sold in the City of Wilmington shall be measured as provided in Section 2 of this Ordinance.

Section 4. No fees shall be paid said measurers of leather by the City of Wilmington, but when called upon to measure leather by any person, firm or Corporation, they shall be entitled to receive for their services compensation at the same rate usually paid for such services by the manufacturers of leather in the City of Wilmington.

Source: Ordinances Passed by the City Council. Jan. 20th, 1910 to July 25th, 1918. Pages 88-89. The Star Publishing Co.

1919

Leather, Principal Industry, Wilmington, Delaware.

Of all the Delaware industries separately classified by the U. S. Department of Commerce, the principal industry is leather, the value of products of the leather industries in 1919 totalling to \$50,138,251 or

30.4% of the total of manufactured products of all business. Upper leather made chiefly of goat skins, by the chrome process is the leather product.

Source: Bevan's History of Delaware, 1929. Vol. 2, p. 771.

1919

"The Glazed Kid City." Wilmington, Delaware.

The district embracing Wilmington, Philadelphia, and Camden, N. J., is the center of the Glazed Kid Industry in this country, with a total of more than nineteen thousand employees. There are seventeen different companies manufacturing Glazed Kid in Wilmington and the product for 1919 was valued at more than seventy millions of dollars. The Amalgamated Leather Companies Inc. has the largest capacity of any plant in the world. They can turn out a maximum of forty-eight thousand finished skins per day. It is stated the product of 1919 for this plant was eight million, four hundred thousands of finished skins valued at twenty-five millions of dollars. Approximately seven thousand persons are normally engaged in the manufacture of Glazed Kid in Wilmington. The payroll amounts to more than five millions of dollars annually and there are invested in the items of real estate, buildings and equipment not including stocks of goods, more than ten millions of dollars. The industry pays over seventy-five thousand dollars in taxes into the City Treasury and the greater proportion of the wages of the employees is distributed among Wilmington merchants, to say nothing of the miscellaneous supplies purchased from local dealers by the various leather companies. A recent report of the Water Department disclosed the fact that due to the shutdown in the leather industry for the past six months, the Department had suffered a loss in revenue because of the decreased consumption of water, millions of gallons of which are used in the manufacture of

Glazed Kid. The shutting down of the leather plants in this city vitally affects the general business of the community. There are three well known and long established concerns engaged in the manufacture of leather working machinery, the George W. Baker Machine Co., the F. F. Slocumb Company, Inc., and the A. C. Layman Machine Co., employing a considerable number of skilled workers The industry consumes great quantities of gas for illumination and fuel, also requires electric current for light and power. Thousands of tons of coal must be brought to this city and distributed to the various plants and this requires transportation and labor. Considerable quantities of chemicals are purchased in this city and the balance is practically all produced in this district by the General Chemical Co., and the National Aniline and Chemical Co., located at Claymont and Marcus Hook. It is believed that the greater part of the five millions of dollars representing the normal annual payroll is spent in Wilmington, and the loss of this volume of buying power is felt throughout the city when industry ceases. Savings must be drawn upon by the workers to sustain their families, which means decreased savings bank deposits, which in turn means less money available for mortgage loans and for other purposes.

Source: Equitable Trust Co. Monthly. No. 10-11. In part. pp. 1.2.
Published at 8th and Market Streets. May-June, 1921.

1925

Leather Tanner, Curried and Finished

There were thirteen establishments, 2,251 wage earners, wages \$2,583,988. Cost of materials, \$11,505,391. Value of products, \$16,989,208.

Source: Bevan's History of Delaware. 1925. Vol. 2, p. 772.

1930

Allied Kid Company, Wilmington, Delaware

Among progressive Wilmington plants is that of the Allied Kid Company, which during the past year has found it necessary to add a new factory, located at 705 East Fifth Street.

This company was formerly the Standard Kid Company, recently affiliated with the Quaker City Leather Company, the McNeely Leather Company, and the Allied Specialty Company, the corporation now being one of the largest in the United States. It has two factories and a warehouse in Wilmington. Business has been above the average and promises to be even better in the near future. The Wilmington officers of the company are: Solomon Ageos, president and treasurer, and Richard C. McMullen, vice president.

Source: Wilmington, Chamber of Commerce. Vol. 5, p. 26. 1930

1931

C. R. Hammell and Son's Kid Co., Wilmington, Delaware

C. R. Hammell and Son's, within the past year (1931), has joined the Wilmington industrial family, having its plant at 708 West Sixth Street. This company manufactured Glazed kid in colors and blacks for shoes and linings. The finished product is sold in European as well as in all domestic markets. Employment is given to fifty persons at the present scale of production. The company was founded by C. R. Hammell, senior, who has for many years been associated with the tanning industry.

The officers of the company are: C. R. Hammell, Sr., V. S. Hammell, C. L. Hammell, C. R. Hammell, Jr.

Source: Wilmington, Chamber of Commerce, Wilmington, Delaware. July 31, 1931. p. 57.

1933

Leather Plant Strikers Back at Work.

With the return of forty strikers to work at the Amalgamated Leather Company, Inc., at Front and Monroe Streets, following applications by approximately 150 strikers, asking that the company take them back to work individually in the morning, the nine-week strike at the Amalgamated Leather was this morning declared ended. There was no picket on duty at noon to day and no meetings scheduled for the striking organization, it was stated by the strikers. William Alexander, vice-president of the local branch of the National Leather Workers Association, which included the strikers, was among those who returned to work this morning. Additional members of the striking group will be put to work on a night shift which will go into operation tonight. Samuel DeMasi, of 206 West Street, and Henry Bonk, of 1127 Chestnut Street, who were among the committee of the 150 petitioners who called on Peter Blatz, Superintendent, made a statement following the conference.

About 150 of our group came in voluntarily this morning and signed applications to return to work at the company office. We talked to Mr. Peter Blatz, superintendent, and asked him whether he would take us back to work individually.

Mr. Blatz told us he felt sorry for the families of the men on strike and would be only too glad to place those men who came back to work and assist them in supporting their families. About forty of us went to work this morning, and as soon as jobs open up for the rest of us they are to be placed. "The strike is over," Bonk and DeMasi said. Among the reasons that made the strikers change their minds, the two men said, was that they were of the opinion that Joseph W. Masada, strike leader from Massachusetts "who tried faithfully and hard" to win their fight for them had made a mistake. We can't continue to suffer any longer

for Mr. Massidas' error however. He acted in good faith, but we think he made an error. Another reason why the men decided to voluntarily return to work was to end the suffering of the families of the strikers. Due to the fact that most of the strikers are voluntarily returning to work, it is believed that those not placed soon will be afforded relief from the relief fund as unemployed. Mr. Blatz said in a statement to the committee, that he had no malice toward anyone, I feel sorry for the families of these men, but I cannot feel sorry for the men. I am very much pleased that the men finally saw their mistake and came back to work. There was no discussion of wages in the return, it was stated, but the plant management has signed the N.R.A. code, and will operate according to its provisions. In addition to the 40 who returned to work this morning, others will go to work on a night shift tonight.

The strike started nine weeks ago, and a continuous picket has been maintained, but since that time, there has been a weakening of the ranks, particularly among the men with families. None of the other leaders of the strikers would make any comment on the situation when seen this afternoon.

The local leader of the striking group, Joseph Perna, was not at the plant this afternoon, but recently made a statement that he could not personally be responsible for the action of the strikers.

Source: Journal-Evening Journal. Wilmington, Delaware. Sept. 21, 1933.

see

Chrome Leather Was the Result of An Accidental Discovery Here.

A Wilmington Chemist Evolved the Widely-used Process while Seeking Another Method.

The revolutionary invention of the method for treating kid leather by the "Chrome method," making it water-resistant and more durable

than is now generally used in the industry, was discovered by a leather chemist in Wilmington, while he was experimenting in ways to bleach black goat hair. The chemist, Augustus Schultz, conducted his first experiments in the former Charles Mullin Company tannery at Front and Monroe Streets, and later in two other tanneries here. He never found out how to bleach goat hair, but as an incident of his experiments he developed the chrome tannage method, used widely to-day in the manufacture of kid skins. Schultz never received full credit for his invention and although he secured patents on the process, it was not widely developed until many years later.

Louis E. Cox, who has been in the leather business since 1883 and now lives, retired from business in this city, was an associate of Schultz and recalls Schultz's early experiments and his accidental discovery of the now widely used process.

In the early days of the leather industry here, rug manufacturers, upholsterers and horse collar manufacturers, all of whom used goat hair, preferred white hair, and paid more for it. A fortune awaited the man who could bleach goat hair. In the early eighties, Schultz, a New York chemist, visited the F. Blumenthal tannery at the corner of Front and Monroe streets. The business was known as the Charles Mullin Company but was financed by Blumenthal.

Schultz was in the employ of a New York aniline dyestuff house, and assured the managers of the Mullin Company that he could bleach goat hair. Charles Mullin was impressed by Schultz's confidence, and gave the chemist permission to stay at the plant and make his experiments. Mr. Cox was an assistant to Mr. Mullin and it was Mr. Cox who brought samples to Schultz for the latter to make his experiments on. One day, after making hundreds of tests, Schultz noticed that his experiments

were having an important effect on bits of hide attached to the black hairs he was trying to bleach. Corset manufacturers then blessed with a wider market than at present had been complaining that alum tanned leather rusted corset stays, steel being covered with a thin layer of kid. The alum-treated ^{leather} absorbed the moisture and brought it into contact with the steel stays. Astonished by the possibilities of his accident^{al}/discovery, Schultz forgot, according to a story in the Alco News, organ of the Amalgamated Leather Company, here temporarily at least, his bleaching attempts, and started to make kid leather which would resist water by his new process. He showed the results of his experimentation to Charles Mullin. The latter was not enthusiastic. It was an innovation and innovations often prove dangerous failures.

But Schultz continued his experiments until he proved that his "Chrome treated" leather was better than the kid treated with sumac or other vegetable tanning medium as was customary. Mullin was finally convinced. The Gibson Leather Company, then located at Third and Conrad Streets in this city, another F. Blumenthal leather tannery, was the place where Schultz made his first whole skin experiments. His first trials were conducted in secret during a holiday when all the men were away. Mr. Coxe assisted him. A few skins were chromed and hypsoed on the same day. They were a complete success. Schultz, sure of the wide use of the process, applied for patent rights immediately and then tried to interest the leather industry. Charles Mullin had sailed for Europe and was gone a long time. Although he could not promote his process, many tanners used it in part or entirely, and Schultz was without funds to combat them. Mullin, back from Europe, started a leather tanning business at Third and Lombard Streets, but the panic under President Grover Cleveland nearly ruined him. Schultz offered his process to Mullin, but he could not take advantage of it. He had not the funds

at the time, but referred to Schultz to Ludwig Roth of the Blumenthal Company.

The Patent Tannage Company was formed and Schultz's patents were bought and the promotion of the great discovery was started. For a while the vegetable tanning process resisted Schultz's process, but the success of a Philadelphia tanner speeded up its general adoption by the industry.

The invention of Schultz, made in the leather plants of Wilmington, was a great contribution to the comfort and durability of shoe leather.

Women are now able to wear light airy shoes without fear of water damage because of Schultz's invention. He never was able to find out how to bleach black goat hair but he did make a much more important discovery.

Mr. Coxe, who helped Schultz with his early experiments, was for many years a kid and calf tanner. He has worked in many of the largest plants in the United States, and held important positions.

Source: Sunday Star. 8-4-1935, p. 7.

Note: The Philadelphia tanner referred to was Robert Foederer, Philadelphia, Pa.

1937
Wilmington, Delaware

The leather industry with 2,692 employees and paying \$3,035,373 in wages headed the list of Delaware industries in number of employees and wages paid in 1937, the report shows.

Source: Journal-Every Evening. Wilmington, Delaware. April 1, 1939. Page 3, Col. 1.

1938

Women's Shoe Whims Rule Wilmington Kid Industry

City Led Nation's Tannery Centers until Depression Ruined the Market;
Skins Travel Tedious Route from Goat's Back to Milady's Foot. A
Horned Goat Looked Meditatively Down into an Indo-China Valley a Few
Months Ago. Today He Protects Milady's Foot, His Hide Transformed
into Kid Leather By a Few Steps in Chemistry.

Wilmington was one time the nation's leading kid leather manufacturing center. It still is a primary city industry. Women are responsible for bringing millions of goat skins here annually to be prepared for shoes. Their caprice in fashion rules the fortunes of city leather firms, men are too tough for goats, their scuffling habits demand the heavier calf leather. Kangaroo, calf, kid, snake, alligator, and other hides are processed in city firms for use in shoes. New York shows once ordered pastel shades of kid leather for chorus girls shoes. In the rolling thunder of dyeing drums come goatskins in colorful native bazaars in North Africa, Morocco, India, China, Asia, Spain, South America and other nations. War's red finger has cut down exports recently from Ethiopia, Spain, and China in turn. Bales of skins go from storerooms in the huge block square plants to start a daily treatment taking five or six weeks. After being soaked in water, hides go to the beaming house to lie in vats of lime or chemicals to loosen the hair, yielding one by-product that efficient modern enterprise so characteristically preserves. Hair goes to textile trade for felt, carpets, upholstering or to jobbers. Trimming from hides, any horns or hoofs, and excess flesh scraped off later, go to glue industries. Hides are put into another chemical bath for several days, where all remaining hair is removed. The skins become gelatinous.

After washing, they are ready for "puering," or neutralizing of chemicals from this bath. The whole process of treating skins consists of a chemical action, a neutralizing, then another action. Puering, a strong germicidal treatment, leaves the skins whitish. They are tanned in a solution of bichromate of soda or chrome. Paddles churn the golden-yellow chemical over the hides for about 24 hours, depending on the kind of skin. After a striking out, or rolling to remove excess chrome and put them in shape, the skins are treated with hyposulfite of soda, leaving them sky-blue in color. Expert chemists constantly seek improvements in coloring formulas. Aniline dye mixtures change skins to all hues of the rainbow after several hours in huge rumbling drums. Superfluous liquid is "struck out," the leather is oiled, and then dried in ovens. In the crust the skins lie a few days to absorb moisture before going to staking machines. Knives or rollers reach forward from these machines, grip the hide and draw it out, softening the leather, bringing out the grain. A coat of seasoning is applied and they are glazed by glass rollers lunging back and forth while a worker holds the leather taut. Trained men grade leather for shipment. Sour old billy goat in fights or biars may have wormed the skin. A near human device measures skins automatically in square feet and fractions, even making deductions for holes. A gear is raised to the thickness of the leather and segments on the gear do the mathematics by touch.

Source: Journal-Every Evening. 2-7-1936. p. 11. Alton L. Blakeslee.

1938

City Long a Kid Center

Glazed kid leather for years has gone from Wilmington to all shoe centers of the United States. Principal leather manufacturers here are the Amalgamated Leather Companies, Inc., Allied Kid Co., Beadenkopf Leather Co., James Q. Bonner. Wilmington Tanning Company puts out calf skins, and Youngco is one of three firms in this country preparing kangaroo hides for shoes. J. E. Rhoads and Sons is engaged in leather belting manufacture, and John R. Rue Company enamels skins for patent leather. Heyday of the kid leather industry was in pre-war and early post-war days. American business as a whole stepped up production expanding plants while Europe's armies drew men from all but necessary factories. Merchant ships carried American goods overseas when Europe reconstructed after the war. Sixty percent of kid leather manufactured here was shipped abroad. A world depression followed in the early 1920's, time saw foreign currencies falling, and Germany struck by inflation unparalleled in modern economic history. Kid leather never recovered but a small part of its foreign markets. Tariff quotas went up, leather manufacturers sought markets elsewhere, with fair success. It is subject to all difficulties of most industries concern^{ed} with tariffs, home or abroad, changing fashions and competition.

Source: Journal-Every Evening. 2-7-1938. p. 11.

1938

Tanneries, Wilmington, Delaware

J. E. Rhoads and Sons, 11th and B. & O.R.R. Wilmington, Delaware.

Members of the firm are Wm. E., Philip G. and J. Edgar Rhoads.

Manufacturers of tannate flat, round, and V belting; oak flat and round belting; lace leather, straps, and mechanical leathers; hydraulic and

Industry and Commerce
Leather

leather packings. Main office and salesroom, 35 n. Sixth Street,
Philadelphia, Pa.

Product sold through stores at 102 Beekman Street, New York City;
26 N. Clinton Street, Chicago, Ill; 1200 W. 9th Street, Cleveland, Ohio;
and at 88 Forsyth Street, S. W., Atlanta, Ga.

Philip G. Rhoads, hides. E. H. Cloud, tanning materials and
machinery, 100 pieces daily. Brand "Tannate" and "Gilt Edge".

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass.
p. 348. 1938.

PRESENT SET-UP OF LEATHER TRADE IN DELAWARE

Tanneries in Wilmington, Delaware

1938

Amalgamated Leather Companies, Front and Adams Streets.
Capitalized at \$2,675,000. John B. Blatz, president and treasurer; William C. Blatz, vice president; J. T. Bishop, secretary and assistant treasurer. Manufacturers, kid and fancy leathers, also reptiles.

Products sold through stores at 210 South Street, Boston Mass. 84 Gold Street, New York, N. Y. 1830 Widener Building, Philadelphia, Pa. 911 Locust Street, St. Louis, Mo. Room 108, Gwynne Building, Cincinnati, Ohio. 752 Lincoln Alliance Building, Rochester, N. Y. 908 N. Fourth Street, Milwaukee, Wis.

Brands, F. B. C., black and colored glazed kid; P. B. C. white color No. 81, golden brown kid color 21. Clio mat and glazed.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. Page 348.

* * * * *

Youngco Leather Co, Sixth and Monroe Streets, Capital \$250,000.
Fred E. Foster, president; F. A. Chilton, vice president; A. L. Gillespie, secretary; Joseph J. Gill, vice president and treasurer. Manufacturers of genuine kangaroo, colored and black cow sides, and kid. Makers of "Ryco" leathers. Product sold by Richard Young Co., 36-38 Spruce Street, New York, N. Y. and branches 54 South Street, Boston, Mass; 130 N. Wells Street, Chicago, Ill; 315 South Main Street, Gloversville, N. Y.; 1627 Locust Street, St. Louis, Mo.; 918 4th. street, Milwaukee, Wis.; and Sydney, N. S. W.

Victor P. Brennan, Factory manager, buyer of tanning materials and machinery. Tanneries also at Gloversville, N. Y. and Peabody, Mass.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. Pg. 348.

Wilmington Tanning Company 208 West Fourth Street

J. A. Josefo, president; Edwin I. Chalmers, vice president; C. A. Milliken, treasurer. Manufacturers of women's weight calf, black and colors. J. A. Josefo, hides; Edwin I. Chalmers, tanning materials and machinery. Product sold direct. Output, 50 to 75 dozens daily. Tanning on contract.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938, Pg. 348.

Allied Kid, Standard Kid Division, Fourth and Monroe Streets.

R. C. McMullen, vice president; John Hull, superintendent. Colored and black kid.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. Pg. 348.

Sterling Division - Allied Kid Co.

Located at Fourth and Monroe Streets. Manufacturers of glazed kid, gold and silver kid. Now making 1,000 dozen per week. Dr. Henry Rose is Superintendent.

Standard Division - Allied Kid Co.

Located at Fourth and Monroe Streets. Manufacturers of glazed kid in white, black and colors. Now making about 3,500 dozen per week. Gov. R. C. McMullen is vice president in charge with John Hull, superintendent.

Specialty Division - Allied Kid Co.

Located at 14th and Poplar Streets. Manufacturers of glazed kid and suede kid in all colors. Now making about 6,500 dozen per week. Saul Cohen is vice president and superintendent.

New Castle Division - Allied Kid Co.

Located at 11th and Poplar Streets. Manufacturers of glazed kid. Now making about 1,500 dozen per week. J. Wirt Willis is vice president and superintendent.

Allied Kid Co., Specialty Division, 11th and Poplar Streets.

Solomon Agoos, president; Saul L. Cohen, vice president; Saul I. Cohen, superintendent, and machinery; C. D. Cohen, tanning and materials. Manufacture suede kid, lining kid, 1,500 dozens daily.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. Page 348.

Allied Kid Co. New Castle Division, 11th and Poplar Streets.

Robert E. Binger, vice president; J. Wirt Willis, vice president. Glazed kid in blacks and colors. Product sold through own stores at 100 Gold Street, New York, N. Y.; 1709 Locust Street, St. Louis, Mo; 42 Andrew Street, Rochester, N. Y.; 265 Werdin Place, San Francisco, Cal.; 803 Sycamore Street, Cincinnati, Ohio; 744 N. Fourth Street, Milwaukee, Wis.; 417 St. Peter Street, Montreal, Quebec, Canada. Export office, 100 Gold Street, New York, N. Y. Foreign agencies Paris, London, Copenhagen, Stockholm, Amsterdam, Oslo. J. Wirt Willis, superintendent. Alfred D. Smith, tanning materials and supplies.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. Pg. 348.

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Beadenkopf Leather Company, 14th and Walnut Streets, Wilmington, Delaware.

C. G. Beadenkopf, president and treasurer; M. C. Barlow, secretary. Manufacturer of glazed kid, blacks and colors. Product sold direct and through E. D. Brooks, 30 South Street, Boston, Mass.; and E. H. Wolf 325 Arch Street, Phila. Pa.; McGaghey Bros., St. Louis, Mo.; W. J. Meyer and Co. Cincinnati, Ohio. C. G. Beadenkopf, buyer.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. Page 348.

Maloney Leather Co., Inc., 8th and Thornton Streets, Wilmington, Delaware.

W. J. Maloney, president; John J. Maloney, secretary-treasurer; John J. Maloney, buyer. Manufacture goat, calf and reptile leathers. Do contract work also.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. Page 348.

Hide and Skin Dealers, Wilmington, Delaware

Joseph Bestes and Son, 311 Market Street. Delaware Hide and Fur Co. 212-220 Tatnall Streets. Eastern Hide and Fur Co. 112 Walnut Street. Sklut Hide and Fur Co. 7 E. Front Street. Wilckens-Staats Co. 216 Tatnall Street. Barr and Dougherty Elsmere, Delaware.

Source: Shoe and Leather Reporter, 210 Lincoln Street, Boston, Mass. 1938. P. 348

VIII

Special and Miscellaneous

Brief History of the Youngco Leather Company

The leather factory on the N.E. corner of 6th and Monroe Streets, Wilmington, Del. was originally owned by the Pyle family, who built the plant shortly after the Civil War and operated it as a tannery.

Francis E. Lynch purchased the property in 1912 and operated it under the name of Francis E. Lynch Company. Victor P. Brennan and Wm. J. Irwin assisted in the management of this Company.

The Company's affairs were incorporated under a Delaware charter in 1919 and the name changed to Youngco Leather Company.

Upon the death of Francis E. Lynch in 1930, Messrs. Brennan and Irwin became managers of the Company and hold that position at the present time.

All types of tanning are carried on by the firm but their speciality is Kangaroo leather, a type of leather that is made by only two other tanneries in the United States; production, about 200 doz. a day of this type leather.

Information supplied by William J. Irwin

Japanned and Enamelled Leathers

Japanning consists in applying to the leather a coating of oil-varnish laid on in successive layers, and usually dried by heat. Enamelling is a term applied to precisely the same process when the leather is grained or boarded. Japanned is often styled "patent" leather, but so far as the writer is aware, has never been made under any valid patent. Japanning is usually done on the flesh side and enamelling on the grain, but flesh-splits are often printed and enamelled.

The first mention of such an idea is in a patent taken in 1799 by Edmund Prior for painting leather with colors and boiled oil and finishing with oil-varnish.

In 1805 a patent was taken by Mollerston for the application of a mixture of linseed oil, whale oil, horse grease, and lampblack, and details are given of its application which are practically the same as these still in use, but a mixture containing fats and fatty oils could never have produced a usable japan, and as patent laws were much less exacting in those days, very probably these ingredients were simply given as a blind to conceal the secret.

Apparently the first japanned leather was put on the market in 1822, while enamelled was not made until 1837. The next patent was in 1854 for details of manufacture, when the varnish ordinarily used was stated to consist of oil, amber, Prussian blue, litharge, white lead, ochre, whiting, asphalt, and sometimes copal and the use of india rubber is claimed.

Any ordinary tannage of dressing leather can be japanned, but as little fat of any sort can be used in currying, the tannage

should be soft and mellow for shoe leathers, and, on the other hand, for the thicker leathers used for harness the grain must be firm and not inclined to "pipe." An essential point is that the leather must not contain grease or fatty oil, which causes the japan to "throw off" or run unevenly, or dulls its lustre, and even traces of grease or oil brought in contact with the finished japan make it soft and sticky. The writer has known where a case where contact with dyed and finished East India sheepskins used as lining, ruined a parcel of dress-shoe uppers, though they showed no signs of greasiness, but were proved by analysis to contain 20 per cent of sesame oil. The beam work should therefore be planned to remove as much natural grease as possible, but it has now become almost universal to degrease leather with solvent which is intended for japanning. For shoe leathers it is most important that the leather should not stretch. The same points must be considered in chrome leather intended for japanning, and especially that absence of stretch.

Source: H. R. Proctor. Principles of Leather Manufacturing.
D. Van Nostrand Co. New York, N. Y. Pages 475, 476. 1922.

Note: Litharge means the scum or foam of silver. Webster's
Dictionary.

Note: Sesame means an East Indian plant which yields oil. Webster's
Dictionary.

Truths about Dressing and Dyeing Furs

Dressing is the process whereby raw furs are made usable to the fur trade, a process akin to the tanning of hide for leather.

Dyeing is the process whereby the dressed furs are made suitable and beautiful and to conform to fashion's preferences.

The processes of dressing and dyeing may only be generalized herein as respective dressers and dyers maintain their "tricks of the trade" as valuable secrets. Furs generally are so sensitive that often the slightest variation in their handling or in materials employed in their dressing or dyeing, produces considerable difference of quality and appearance, so that naturally, when an artisan discovers a better method, whether through experiment or accident, he most zealously guards his secret.

Generally speaking, however, the dressing processes are as follows:

1. The skins are dampened on the flesh side with salt water, after which they are left to soften for a period of hours.
2. The skins are placed in a treading machine where they are tramped or pounded for the necessary length of time.
3. The pelts are moistened with a mixture of sawdust and salt water and permitted to so remain from six to twelve hours or more, depending upon the nature of the pelt.
4. The skins are fleshed, that is, a skilled workman employing a tool removes the flesh particles, being careful to avoid injury to the skin.
5. Skins are stretched and hung to dry.

6. When thoroughly dried the skins are moistened on the leather side and permitted to remain so for a number of hours.
7. Skins are brushed on the leather side with animal fat, butter, or oil and laid out for a sufficient number of hours.
8. Skins are placed in treading machines, where they are worked for hours until thoroughly soft and pliable.
9. Skins are thoroughly stretched in every direction.
10. The cleaning process then takes place, whereby several hundred skins are placed with veneer sawdust in revolving drums, exposed to heat. They are revolved for three or four hours, during which the sawdust will have completely absorbed the grease.
11. The skins are placed in a beating drum for several hours, and on removal are beaten with rattans and then frequently cleaned with a comb.

These processes, of course, are varied to suit the special needs of respective furs. In some instances, for the finer furs, some of the machine processes must be substituted, and hand work almost entirely employed. But this resume of the fur-dressers job reflects the extensive amount of work and care necessary to the preparation of even the cheapest furs.

Time was when dyed fur was held in poor repute. The dyeing process would injure the pelt; the hair would shed more readily; the dye would not prove permanent. Nowadays furs are dyed in America to desirable shades or to resemble more desirable furs. No more is the dyer blamed for faults natural to unprime skins or to carelessness in the dressing of skins. The American fur dyer

must be credited with having broadened both the quantity and the variety of usable furs.

Today the American dyer asks no odds of his European rival and is as progressive in the development of new coloring processes. He has so perfected his methods as actually to improve the quality of the natural fur, aside from adding much to its natural beauty.

Source: Fur Truths. Abraham Gottlieb. In Parto. Pages 60, 61, 62, 64. Harper and Brothers. 1927. New York, N. Y.

Quebracho

Quebracho Colorado contains 17 to 20 per cent of tannin, which is of red color and difficultly soluble. There is a catechin present, and fustin, a coloring matter, which is identical with that of "young fustic."

Some of the colorings present are very difficult to separate, and so cause much annoyance in practice, as they impart a disagreeable red color to the leather. When quebracho wood is ground, it rapidly loses its tannin on exposure to air. The bark of the wood, which contains about 13 percent of tannin, does not tan. On account of the large quantity of soluble tannins present in quebracho, the liquor made from its extracts generally turns turbid on coöling.

This difficulty has been overcome by heating the extracts in closed vessels with bisulphites, sulphites, sulphides, and caustic alkalies, the products being known as "soluble Quebracho extract" and sold as such.

The tannins present form compounds with the alkaline sulphites, setting free the sulphurous acid and combining with the base. However, in the course of manufacturing, the greater part of the sulphur dioxide escapes, leaving the extracts alkaline, or neutral.

The analysis of quebracho includes the usual determinations, and great care should be taken to work with liquids containing the correct amount of tannin, since in stronger solutions the results obtained by the hide-powder filter differ considerably from those obtained with dilute solutions, the powder appearing to have the power of absorbing larger quantities of soluble non-tannins from concentrated solutions. It has already been mentioned that if a sulphited extract be treated with a neutral

hide powder, a part of the tannin, namely, that combined with the alkali, is not absorbed. This difficulty may be overcome by the use of an acid hide powder.

Note: Quebracho comes from the Argentine, S. A.

Source: Leather Trades History. S. R. Trotman. Page 166. 1908.

Imitation Kid

For preparing this kind of leather, lamb skins are employed. These skins are imported from the shores of the Mediterranean "in the wool," as it is termed, and this, being a valuable commodity is removed with very great care before the operations on the pelt commence. Since the wool would be impaired if the skins were subjected to the process of liming, the skins are submitted to a process of sweating, or putrefactive fermentation, by which the wool becomes loosened from the pelt.

Sweating. The skins are first steeped, or drenched, in water for several days, after which they are broken on the flesh side. They are then again steeped, or drained, and while still wet are transferred to a close room, sometimes an underground vault, the temperature of which remains nearly uniform all the year round. In this the skins are suspended from rails or bars. After a certain time fermentation commences, ammonia being given off in considerable quantity, together with a powerful and offensive odor. In about five days the wool becomes loosened from the pelt, but the skins are carefully examined from time to time before the process is complete, as it is of the greatest importance that the sweating process should be arrested and the skins withdrawn at the proper period, otherwise the pelt itself would suffer injury from the decomposition which ensues.

When the sweating is completed, the skins are removed and worked on the beam, or slimed, as it is termed, that is, scraped on the flesh side with the beam knife, to remove a slimy matter which exudes from the pores. The wool is then removed, and this is afterwards cleaned and prepared for sale. The unwooled pelts are next steeped in the lime-pit for about a week to "kill" the grease, and after this they are fleshed on the beam.

This having been done, they are next placed in a drench of sour bran liquor for several days to remove the lime and open the pores. They are next treated with the alum mixture, and in all other respects treated in the same way as kid skins. These skins generally measure about 20 inches by 12 inches, and each skin produces leather for two pairs of small gloves.

Source: Leather Manufacture. Alexander Watt. D. Van Nostrand Co. New York, N. Y. Page 312, 1906.

To Prevent Colored Leather From Fading

A dressing of borax and shellac is used to prevent the color of furniture and other leather from fading. It is made as follows: Boil one ounce of borax in three quarts of water and add, while it is boiling, one and half ounces of shellac and just enough aniline dye of the same color as the leather to match the shade. The mixture is then allowed to cool and is ready for use. This dressing should be applied to the leather with a soft sponge, slowly and with care, to prevent streaks. Care must be taken, too, in selecting the shade to correspond with the color of the leather. After the dressing has been applied the leather should be hung up by the neck, grain side out, to dry. When dry, it should be rubbed lightly with a soft woolen cloth or brushed over a felt wheel. This dressing does not affect the character of the leather, but the correct portions of ingredients must be used, as if, made stronger, the mixture is apt to make the grain brittle. The leather should be well brushed, and if dirty washed with warm water, if possible, before the dressing is applied.

A dressing made of casein and ammonia is also said to be effective in preventing the fading of colored leather. Boil a pint of water, as soon as it begins to boil, add half a pint of spirits of ammonia, and then dissolve in it about two ounces of casein. Stir the mixture well until solution is complete, and then dilute with water to about six quarts. The dressing can be applied at once to the leather after coloring, while still moist, evenly and lightly until it penetrates. If the leather is dry the dressing must be laid on still more lightly.

This solution of casein can also be applied to make up articles, such as saddlery. The leather should be clean before the dressing is applied, and then dried in a warm room and rubbed with a soft woolen cloth.

Source: Practical Tanning. Louis A. Fleming. Henry Carey Baird, Phila. Pa. 1910, Section II. Page 498.

White Napa Leather

The process of tanning sheepskins into what is called Napa leather originated in Napa, California. It is more of a curing than a tanning process and may be called a soap and oil process. The leather it produces is possessed of considerable strength and softness and is used for purposes where inexpensive leather is required. Light weight skins are used. For white leather, skins having damaged grain are finished upon the flesh.

The original process of making the leather consisted of removing the wool by sweating the pelts and then treating the skins to the tanning or curing process. No lime was used and the skins were thus left flat and with their strength unimpaired. Various modifications of the process have crept in, due to the changed processes of preparing the skins. At the present time the wool is removed with sulphide of sodium or another depilatory. The skins are given very little or no lime at all, but of course, must be thoroughly washed before they are tanned. Pickled skins should be pressed to remove the grease and then drummed in warm salt water to get them in condition to be tanned. The original process was as follows - For two hundred skins, twenty pounds of salt, thirty pounds of white rock potash and three hundred gallons of water constituted the first part of the process. The skins were left in the liquor for two or three hours, then wrung out as dry as possible and immersed in the second solution. This consisted of twelve pounds of hard soap, two gallons of neatsfoot oil, and one hundred and fifty gallons of water. The skins were left in this liquor until it had penetrated them, then they were dried and passed through the process a second, and even a third time, as they seemed to require. After the last drying, the

skins were washed in clean water to make them clean and soft, and were then dried and staked. Pickled skins are partly cured when received at the tannery, and in some instances it suffices to merely neutralize the acid in them. For this purpose, soda or borax and oil may be used. For white leather, the skins receive no further treatment, but are dried in a warm room and finished as quickly as possible.

White Napa leather is finished upon the flesh, as the grain is usually very imperfect. The dried skins are moistened and staked, and when they are dry and soft, they are buffed on an emery wheel and made clean and soft upon the flesh. This requires considerable skill to get an even surface, and not to cut through the skin. When finished, the skins are soft, white and clean.

White skins must be free from grease natural to sheepskins, or they will be a dirty yellow when finished.

Source: Practical Tanning. Louis A. Fleming. Henry Carey Baird, Phila., Pa. 1910. Section 2. Page 133.

White Chrome Leather

An excellent imitation of alum leather is made by tanning sides in a one-bath chrome process, and then either bleaching the leather with borax and sulphuric acid or treating it with flour or both. Hides for this process should either be split out of lime, bated and pickled, or bated whole and pickled, and then split. Any one bath-tan process of chrome tanning can be used. When the leather is tanned, wash it in a fairly strong and hot solution of borax for one-half hour. Then prepare a solution of sulphuric acid and water, made by adding acid to water until the solution is as sour as a lemon. Take the leather from the borax bath and wash it in the acid bath; or drain the former out of the drum and put the latter in and wash the leather twenty minutes; then wash it in clear water to remove the acid, after it is ready for fat liquoring.

Drumming the leather in flour is another way to make it white. If the borax and acid treatment does not make the leather as white as is desired, the sides can be drummed in flour and water. The flour treatment can be used alone, and the leather will be white enough for most purposes.

The leather is washed after tanning, and is then given the flour treatment. About fifty pounds of flour are used for from fifty to one hundred sides according to size. The flour should be stirred with water before it is used. The leather should be drummed in the flour for about two hours; then it is fat-liquored. A suitable fat-liquor is made of soap and neatsfoot oil; or better still, use acid fat liquor dissolved in hot water, as described for alumina-tanned leather. From five to six pounds of

the oil will fat-liquor one hundred pounds of chrome leather. Mix the oil into ten gallons of hot water and apply it to the leather after the flour treatment. Then hang the leather up to dry. When dry dip the leather into warm water and place in a pile over night.

Finishing. Stake the dampened leather, then mill it in a closed wheel with powdered chalk or soapstone for one hour or longer, after which, stake the leather again and it is ready for use. Properly tanned and fat-liquored, the leather finishes up very soft and white and is admirably adapted to the purpose for which it is intended.

Good white leather can also be made by tanning the sides with alum, salt, and flour, and then after drying, dampening and fat liquoring the leather with acid fat-liquor. White leather must be handled very carefully or it will become soiled and dirty. Chrome-tanned white leather is more satisfactory than alum-tanned if properly tanned and bleached.

Source: Practical Tanning, Louis A. Fleming. Henry Carey Baird. Phila., Pa. Section 1. Page 40. 1910.

Mocha Castor Glove Leather

The tanner who wants to make mocha castor glove leather from kid and goat skins will find the following described process satisfactory.

The dry skins require, first of all, very thorough soaking. Soak them in clear cold water for twenty-four hours to thirty-six hours, then drain and cut them open. To further soften the skins and to make them perfectly clean for the lime, run them in a mill with plenty of water, then let them drain before flashing and liming them.

Liming should be done in clean, white limes, using no red arsenic or sulphide of sodium. The first lime should be clean, white and weak, the skins being passed from it into stronger lime and limed very thoroughly; or a gathering lime can be used by hauling the skins out each day and adding fresh lime. When the hair comes off easily, the skins should be unhaired and the grain frizzed. After frizzing put the skins in a weak lime water for two or three days, then wash them in warm water and drench them. Drenching is done with lactic acid, in a drum. One hundred skins, unhaired and washed, require about one quart of acid, in ten pails of water at a temperature of 90 degrees Fahr. Mill the skins in this solution for one hour, then rinse them in warm water, let them drain, and they are then in condition to be tanned. The tanning is done with alum, salt, egg yolk, and flour. For each dozen skins, dissolve twelve ounces of alum and four ounces of salt so as to make a pail of liquor and mill the skins in this solution for thirty minutes; then add one paid of flour for each ten dozen skins and one quart of fresh egg yolks, and mill the skins thirty minutes longer. Take them out of the

drums and hang them up to dry.

When they are dry, put them away in a dry, cool place for a few weeks to give them time to become entirely tanned. To finish the skins, dampen them and mill them in flour, then knee stake them, dry them, and then run them on an emery set with fine emery. After this has been done, wash them with water, and give them two quarts of egg yolk to twelve dozen skins. Then dry them again, knee-stake them, and finish them on the finest emery.

The skins should now be very soft, dry and white and can be used for white gloves or other purposes for which such goods are required.

If colored skins are wanted, they can be easily colored any shade as they take the dye readily; then staked and finished with the finest emery.

The finished leather, when the work has been properly done, is very soft and full, and either a nice white or of a deep and uniform color. This process can also be used on skins with the grain on. Sulphonated oil may be used in place of egg yolk. It is dissolved in warm water and the skins milled in the solution. They acquire by this treatment great softness and strength and a finer appearance. These methods of tanning are excellent for any kind of kid glove leather.

Source: Practical Tanning. Louis A. Fleming. Henry Carey Baird, Phila., Pa. Section 5. Page 292. 1910.

Roller Leather

The leather is made from lambskins tanned with bark. It is used by cotton spinners all over the world. There are only a few tanners who have been successful in making this leather, and those who have, have had all the business they could attend to, finding a ready sale for their output. The qualities that roller leather must have to be satisfactory are level substance, clear and perfect grain that has no scratches, scars or cuts, smooth feel and pliability with a certain amount of firmness. Only the best skins should be selected. The leather must be perfectly smooth on the grain or the cotton thread when it is drawn between the rolls, one of which is covered with leather, will keep breaking. As a light color is essential, only clean, light-colored bark liquors can be used. The natural grease contained in the skins must be removed since the edges of the leather covering the rolls are cemented together before being slipped on to the roll, and if there is grease in the leather, the cement will not hold. The preliminary tanning is done in weak bark liquor. The skins are tanned by suspension since a smoother grain is produced in this manner than with the use of paddle wheels or vats. The liquor is composed of oak bark and extract of increasing strength in which the skins remain two or three weeks, when they are hung up and dried, they are stored away until they are to be finished. The longer the skins are kept in the dry condition the better they are when finished.

When the skins are to be finished, they are sorted. Those that are not as perfect as they should be are finished into fancy leather for pocket-books and book-binding. The roller skins are

then dampened and shaved. The shaving must be accurate so that the skins will be of even substance. However, the skins do not all have to be reduced to the same thickness as some of the roller manufacturers make three or four different substances.

After shaving, the skins are drummed in a sumac solution, and then they go back to the tan again to receive a stronger liquor. After being rinsed in water and drained, the skins are struck out on the flesh and tacked out to dry. When dry, they are taken off the boards and softened, then trimmed and seasoned with milk and albumen, dried and rolled, perched by hand, and next reseasoned and glazed. The finished skins are then marked with a frame on the flesh side and trimmed with a pair of shears. As every skin must be removed, the skins are wiped over with a cotton wool pad to find remaining hairs, which are removed very skillfully so as not to break the grain. The skins are then ironed, sorted for substance, and put into grades and sizes. The processes, of course are not always followed exactly as outlined since those making this leather change them here and there in accordance with the best results obtainable. Oak bark makes better roller leather than hemlock, since it contains less filling matter and produces lighter-colored skins.

Source: Practical Tanning. Louis A. Fleming. Henry Carey Baird Co., Phila. Pa. Section 2. Page 167. 1-10.

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Hemlock Tanning

The great success which attended the employment of hemlock-bark in some parts of the United States induced English tanners to turn their attention to this prolific source of tanning material, and during the past thirty years or so an extract of the bark has been imported from Canada in large and increasing quantities.

The hemlock spruce-fir abounds in the northern States of Pennsylvania and Canada, and the readiness and cheapness with which the bark is obtained have rendered it the chief tanning material of those states, and a source of considerable industry in Canada. The extract comes over to this country in casks, of the consistence of treacle, and is of a dark brown color. This extract is not soluble in cold water, owing to the large amount of resinous matter it contains, but it is freely dissolved in water at 150° Fahr. It may be employed alone, but owing to the indifferent color it imparts to leather, it is generally used in combination with other tanning materials.

Source: Leather Manufacture. Alexander Watt. D. Van Nostrand, New York, N.Y. Page 245. 1906.

Tawing, as Distinguished from Tanning

In the process of tanning, the gelatine of the skin undergoes a chemical change when brought into contact with tannin, by which tanno-gelatine is formed, a substance not only insoluble in water, but which cannot be again separated into its two chief constituents, tannic acid and gelatine, by any known means. In the process of tawing, however, the skins are subjected to the action of alum and salt, which, although they convert the skins into a substance resembling leather in some of its attributes, cannot be said to form a true chemical compound with the gelatine, in as much as the three substances, gelatine, alum, and salt, can be again separated by treatment with water, as proved by the researches of Davy. The arts of tanning and tawing are therefore perfectly distinct, and have no relation whatever to each other.

Some manufacturers of light leathers, however, carry on the process of tanning calf and seal skins, as well as the tawing of goat, kid, sheep, and other small skins. The chief operations of tawing are: 1. Soaking, or steeping in water; 2. Breaking or scraping on the flesh side; 3. Liming; 4. Unhairing and fleshing; 5. Steeping in a bran-water drench; 6. Working on the beam; 7. Treatment with alum and salt; 8. Egging, an emulsion, or paste.

The skins which are subjected to the operations of tawing, or alum dressing are those of the kid, the calf, the lamb, and the sheep, the first being employed to produce the well-known "Kid leather," from which the finest sorts of gloves and uppers of ladies' shoes and boots are made. Lamb skins form an imitation kid leather from which the cheaper kinds of "kid" gloves

are made.

For leather to be employed for the finest quality of gloves, the skins are obtained from young goats before they leave the mother to feed on herbage.

Source: Leather Manufacturing. Alexander Watt. D. Van Nostrand Co. New York, N. Y. 1906. Pages 306, 307.

Note: Dr. Davy from experiments found that lime does not exercise a destructive corroding power on animal substances generally.

Sumac

Sumach (Sicilian) is the leaves and small twigs of *Rhus Coriaria*, which is a bushy shrub cultivated in Italy for the extensive production of this tanning material. Suckers from older plants are planted in rows during spring and begin to bear the following year, though the older plants give better tannin strength. The leaves are picked by hand, or the shoots pruned from July to September, and dried in the sun in the fields or under cover. If the leaves only are collected the plants are pruned in winter. If pruned when gathered the dried shoots are beaten to separate leaves and stems. This is leaf sumach and may be exported in this state. Some, however, is packed by hydraulic press, sent to Palermo, and there ground to a fine powder in stone mills. For this to be done properly there must be left in with the leaves a certain proportion of stems. The product is ground sumach and yields "ventilated sumach" by winnowing over a screen, the light leaves passing over and leaving the heavy stems and sand behind. Mascolino is the best sumach. Good sumach should contain 26 to 28 per cent of tannin, which is nearly all gallotannic acid. It is an extremely valuable tanning material, giving a soft tannage, excellent color and durable leather.

Source: The Manufacturing of Leather. Hugh Garner Bennett. D. Van Nostrand & Co. New York, N.Y. Page 192. 1910.

English Capitalists Here. Wilmington, Delaware

Purpose to buy glazed kid for shipment to the United Kingdom

As the guests of John Craig, the well known real estate broker of this city, a party of five distinguished English capitalists have been visiting Wilmington for the purpose of buying in large quantities glazed kid for shipment abroad. The visitors were under the escort of W. H. Brunt, a native of England, and a member of the New York Produce Exchange, and are all members and directors of the English Cooperative Society, having offices in all the principal cities of the United Kingdom. Upon their arrival they were met at the P. B. and W. station by Mr. Craig and were driven to several of the large morocco establishments of the city, where the stock was examined and much pleasure was expressed at the quality of the kid on hand. The party were dined by Mr. Craig and left here for Baltimore and Washington from whence they will proceed to St. Louis and visit the World's Fair. On their trip East they will stop in Canada where the society has large holdings. The party arrived in New York on the steamer Voltic, September 29, and will sail for England November 2nd. The English Cooperative Society is one of the largest concerns abroad and deals in all classes of merchandise. Mr. Craig met Mr. Brunt while abroad during the past summer.

Source: The Wilmington Board of Trade Journal, Vol. 6. No. 7.
Page 5. Oct. 1904.

Leather

From: The Encyclopedia Americana. 1936 Edition. Vol. 17., Page 151.

Of all the ancient industries, the manufacture of leather is one of the most interesting on account of the convertibility of an easily decomposed substance into one which resists putrefaction. The manufacture of leather is as old as history itself. In China the manufacture and use of leather was known before the Christian era, and in Egypt leather has been found in the mausoleums of the ancients, showing that the nations in the remote ages of the past were practised in the art, and left slight traces of their high civilization to be admired today. The Persians and Babylonians passed the art over to the Greeks and so down through the different medieval nations to us. The American Indians were also versed in the art of making leather; the fact remains that they also discovered a way of treating the skins of animals in such a way as to prevent the putrefaction of animal tissues. The skin of an animal consists of three layers, the outer skin which cannot be tanned is removed with the hair, leaving the middle skin or grain, and the under skin or flesh. The upper part of the skin in which the coat of hair, wool, or fur is rooted in a thin layer termed the epidermis or cuticle. Next beneath this is the much thicker corium or true skin, and next to this the under skin. The epidermis does not combine with tannin or other substances to produce leather, it is useless to the tanner, and is removed at the same time as the hair. The quality of the leather which can be produced from a skin depends upon the thickness, flexibility, and strength of the corium, which exceeds the combined thickness of all the

other layers of the skin. Leather is made from goat skins, sheepskins, horsehides, pig skins, and in a small measure, dog, kangaroos, deer, peccary, alligator, seal, walrus, and buffalo. Goatskins are used for shoes, gloves, bookbinding and fancy leathers. Sheep skins are used for shoe linings, gloves, and fancy leathers; horse hides for shoes and utility gloves; pigskins for bookbinding and saddle seats; dog skins for gloves; kangaroo for shoe leathers; alligator for bag leathers; walrus for jewelers' polishing wheels; and buffalo for heavy soles and robes.

Chamois Leather

This kind of leather is well known to the general public under the name of wash-leather, but it is perhaps not so widely known that there is no real chamois leather available, since the species of animal bearing this name is almost extinct. Nowadays, "chamois or shamoy" is made from the split of a sheep skin, and the method whereby the leather is produced is described as the oil tannage. The chamois leather dresser may also do the preliminary work of fellmongering, but more often he receives the pelts or "fells" from the fellmonger. Although the pelts have been in a lime liquor known as the fellsmonger's "gathering limes," the process of liming has to be continued and carefully regulated. Too much liming makes the pelts loose, owing to the development of bacteria. This effect would cause the finished leather to be soft and spongy. On the other hand, under-liming fails to remove sufficient of the cement substance which binds the fibres of the pelts; consequently the leather produced from the pelts is thin and somewhat gristly. After being limed, the skins are "cobbed" (the bits of wool or hair left on by the fellmonger are removed) and the pelts are then fleshed by machinery. The next operation, splitting, is very important and requires skillful attention to get good results. The best linings are generally sorted out for making into parchment, which of course commands a much higher price than chamois.

Linings for chamois are then submitted to the operation of either re-splitting or frizzing, the object being to remove the loose tissue lying between the grain and the flesh. The pelts are re-split in the case of cheap chamois but frizzed if intended

for choice finish. Frizzing is an operation peculiar to the making of chamois and glove leather. It is done with a very sharp knife, similar to the fleshing knife, and on a more upright beam than that used by tanners. The work requires great skill, frizzers being among the best paid workers in the trade. Frizzing done, the linings are freed from lime by washing them in a drum tumbler, or paddle-vat, through which cold water is allowed to flow continuously for two or three hours. When lamb skins, which are too thin to split, are made into chamois leather, the grain is removed by frizzing.

A quick and effective method of deliming is to treat the skins in a weak solution of lactic acid. Some dressers use a drench of pea flour or bran. The mild acids produced by the fermentation of these materials not only neutralize the lime but also reduce the gristly nature of the skins to a soft, supple condition. The bran infusion is slightly warmed to hasten the process of fermentation, but the temperature must not exceed 100 F (32.c). The linings are then rinsed in cold water and sent to the stocking machines, in which they are kneaded until they become quite soft. Either the fallow-stocks or the mechanical pushers may be used, the latter being the more machine.

The operation may require from four to ten hours, the completion being determined by the condition of the skins.

Source: Common Commodities of Commerce. K. J. Adcock. 1915.
Pages 144, 145, 146, 147.

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Morocco Leather

Morocco leather is a kind of leather made from the skin of goats and tanned with sumac. It was used extensively in the binding of books, the making of shoes, upholstery, furniture, etc. The art of preparing it was derived from the Moors.

Source: The 20th Century Encyclopedia. 1933. Vol. 7.

Shoemakers in the Year 1814, in Wilmington, Delaware

Nathan Barnes, W. Queen Street
 Geo. Blackwell, 165 Market Street
 Thomas Bowers, French between 3rd and High Streets
 Thomas Cable, 10 E. Second Street
 Thomas Crozier, 50 King Street
 Philip Critson, Cor. French and Queen Streets
 Benjamin Devon, 3 West High Street
 Daniel Dingee, 78 King Street
 John Griffing, 7 E. High "
 Thomas Griffing, 24 E. High "
 John Hagany, 73 Market "
 David Hayes, 88 " "
 Theophilus Jones, 27 Market "
 A. McAllister, 104 " "
 John McLivane, 31 " "
 James McKean, 31 " "
 Valentine McNeal, 100 " "
 Joseph Moore, 68 " "
 Richard Poole, 8 " "
 William Poole, 46 King "
 Thomas Springer, 79 " "
 Joanthan Sturges, Walnut Street
 Charles Taylor, 42 E. Second Street
 John Crips, Shipley between Broad and King

Source: Scharf's History of Delaware. Vol. 2. Pages 644, 645, 646, 647.

Morocco Manufacturers, Wilmington, Delaware (1906-7)

The American Leather Co.

The Charles Baird Co., 112-114 Walnut Street

Barr and Dougherty, 214 E. Second Street

Charles Beadenkopf, 1007-1111 W. Fourth Street

Wm. Beadenkopf, 14th and Walnut Street

F. Blumenthal and Co., Lancaster Ave. and Adams Street

James Q. Bonner, 202 W. Fifth Street

Continental Leather Co., Fifth and Church Street

Delaware Leather Co., 13th and Lombard Street

Doeber and Betz, Conrad and Adams Street

The Ford Morocco Co., 2nd and Greenhill Ave.

Charles E. Fritz and Co., 211 W. Third Street

Illinois Leather Co., Market Street and Bridge

W. Jones and Co., 104-110 Walnut Street

Mitchell and Thomas, 106 Maryland Ave.

New Castle Leather Co., 11th and Lombard Streets

C. & J. Pyle and Co., 6th and Monroe Streets

C. W. Pyle and Co., 401-405 Van Buren Streets

United Leather Co., 708-718 W. Sixth Streets

Source: Delaware Gazetteer. 1906-1907. Page 1247. R. L. Polk & Co.

Leather Manufacturers, Tanners and Curriers - Delaware (1859-60)

Benjamin Shepherd	Gumborough	Delaware
William W. Dulaney	Laurel	"
George Hare	Milton	"
Hiram Walker	Pleasant Hill	"
Peterson and Mustard	Smyrna	"
Jos. Morris	Tunnell's Store	"
I. T. Chamberlain	Fourth cor. Orange Street	Wilmington
H. S. McComb & Brother	Orange cor. Third	" "
Amos C. Hamilton	208 W. Third Street	"
R. H. Jones	102 Market Street	"
Baynard & Jones	Walnut between 2nd and Front	" "
George T. Clark & Co.	" " " " " "	" "
J & W.H. England	Church and Lord Streets	"
Hacket and Griffin	211 W. Third Street	"
Hayes and Richardson	210 W. Third	"
Stephen Postles	204 W. Fourteenth Street	"
Pusey and Scott	301 Tatnall Street	"
William Pyle	W. Sixth cor. Monroe Street	"
William Hooper	Laurel	Delaware
Henry Wilson	"	"
Philip Fisher	Wilford	"
Benjamin Burton	Millsborough	"
Asbury Dunphar	Whiteleysburgh	"
Downing and Price	Newport Road near Dock	"
Dennis Condon	no address	Wilmington

Source: Boyd's State Directory. 1859-1860. Pages 233, 239, 245, 246, 262.

Boot and Shoe Makers and Stores, Delaware (1859-60)

John W. Steel	Angola	Delaware
Wm. Millis, Jr.	Bridgeville	"
James Fountain	Camden	"
Henry M. Hill	Camden	"
Main and Remppel	Camden	"
James Stilley	Centreville	"
Wm. Levy	Christiana	"
George Loyd	Christiana	"
Stephen B. Field	Concord	"
John H. Benson	Dagsboro	"
John W. Radish	Dagsboro	"
Carrell and Miissig	Delaware City	"
John Fraley	Delaware City	"
Charles Marchand	Delaware City	"
David Robertson	Delaware City	"
John M. Smith	Delaware City	"
B. B. Bennett	Dover	"
George Smither	Frederica	"
John M. Sutherland	Frederica	"
David S. Murray	Glasgow	"
William Walker	Glasgow	"
Purnell Baker	Gumborough	"
Henry Batts	Gumborough	"
Dawson and Wolfe	Gumborough	"
Louder N. Hearn	Gumborough	"
John D. Littleton	Gumborough	"
David Herrington	Hazlettsville	"
John Walker	Kennett's Pike	"

James Davis	Laurel	Delaware
John H. Hall	Laurel	"
Manlove Killingsworth	Leipsic	"
Ezekiel N. Reed	Leipsic	"
W. Lee Bromley	Lewes	"
Jacob M. Hall	Lewes	"
Jacob Marshall	Lewes	"
William Reynolds	Lewes	"
James McClelland	Loveville	"
James W. Draper	Magnolia	"
Thomas W. Jones	Mermaid	"
Peter Denning	Middletown	"
Joseph Earnest	Middletown	"
Andrew Husebech	Middletown	"
John Randall	Middletown	"
Robert Clark	Milford	"
Thomas Gray	Milford	"
Reedy and Brother	Milford	"
Wm. H. Shockley	Milford	"
John Elliot	Millsborough	"
A. G. Hastings	Millsborough	"
Geo. P. Alcorn	Milltown, near Stanton	"
Henry S. Boddy	Newark	"
Choate and Brother	Newark	"
George R. Gardiner	Newark	"
James Murphy	Newark	"
Israel H. Fols	New Castle	"
Aaron Kropp	New Castle	"
James Steelman	Newport	"

B. F. Terry	Newport	Delaware
F. A. Hyatt	Odessa	"
M. Stapp	Odessa	"
Newton B. Eastburn	Pleasant Hill	"
Geo. M. Dixon	Port Penn	"
Wm. C. Webb	Port Penn	"
Benjamin Button	Red Lion	"
Thomas Laws	Red Lion	"
Samuel S. Baldwin	St. Georges	"
Gottlieb Stringer	St. Georges	"
William F. Robinson	Seaford	"
John Cosden	Smyrna	"
Adam Dady	Smyrna	"
Richard Hastings	Smyrna	"
Edward McDonald	Smyrna	"
McKensey and Co.	Smyrna	"
George L. Stradley	Smyrna	"
Balke and Tolson	Smyrna	"
Robert Howard	Stanton	"
James A. Carey	Tunnell's Store	"
R. P. Hancock	Tunnell's Store	"
Lusk McCabe	Tunnell's Store	"
Bart Tire	Tunnell's Store	"
Eli Dill	Whiteleysburgh	"
David Marine	Whiteleysburgh	"
Joseph Bieta	517 Tatnall Street	Wilmington
J. W. Birnie	2 W. Second Street	"
Wm. Boddy	229 Market Street	"
Shipley P. Burns	Water Street	"

Thomas Chalfont	204 Tatnall Street	Wilmington
Thomas Clark	800 Church cor. Eighth Street	"
E. K. Crawford	4 West Second Street	"
David Darrell	416 East Second Street	"
Charles Flanigen	102 West Second Street	"
John Fullmer	408 Market Street	"
L. Glatts	315 W. Front Street	"
James Grubb	121 Market Street	"
James Grubb, Jr.	402 Market Street	"
Geo. S. Hagany	8 West Second Street	"
Joseph Hall	209 King Street	"
Henry Hoopes	515 Market Street	"
Peter G. Hutchinson	213 W. Fourth Street	"
Andrew Jack	613 Market Street	"
Edward Jack	405 Shipley Street	"
Brister and Jenkins	303 E. Sixth Street	"
J. C. Johnson	315 Poplar Street	"
John Jones	211 Orange Street	"
Tehophilus Jones	119 Market Street	"
James Kane	519 E. Sixth Street	"
Henry Kienle	320 E. Second Street	"
H. Kitts	106 West Second Street	"
Joseph Kline	1011 Market Street	"
Edwin Lewis	601 Poplar cor. Sixth	"
Isaac R. Lobb	Brandywine Village	"
Thomas McCracken	407 Orange Street	"
Peter McCollough	823 Walnut Street	"
Andrew McKee	604 Market Street	"

Samuel J. McLachlan	312 King Street	Wilmington
James Maharty	718 Shipley Street	"
B. L. Moore	724 Market Street	"
John B. Murphey	Brandywine Village	"
James O'Toole	6 East Front Street	"
G. W. Pyle	104 West Second Street	"
Jacob Rebman	301 West Sixth Street	"
James Reedy	12 West Sixth Street	"
Charles Reynolds	2 West Fourth Street	"
George Rockenback	229 Market Street	"
J. Saring	424 West Front Street	"
John Sasse	306 French Street	"
Thomas Schalfant	204 Tatnall Street	"
S. Schofferer	200 Tatnall Street	"
Leopold Schumaker	209 West Front Street	"
Mauritz Smith	712 Locust Street	"
James R. Strahan	831 Shipley Street	"
Patrick Taggart	504 E. Eighth Street	"
Anthony Theilman	719 Tatnall cor. West Eighth	"
Wm. Thompson & Co.	821 Market Street	"
Charles A. Tryon	702 King Street	"
William Turner	217 Shipley Street	"
William Willis	218 E. Second Street	"

Source: Boyd's Delaware State Directory. 1859-1860. Pages 196, 197, 198, 199.

1859

Wilmington, Delaware

Isaac T. Chamberlain, north east corner of Fourth and Orange Streets, Wilmington, where may be had cheap for cash, or satisfactory acceptance, a general assortment of Finished Leather and Moroccos, also Red and Oak Sole leather; Patent Machine-Stretched Bands, cemented with waterproof cement and copper rivetted, constantly on hand and made to order. Warranted to give satisfaction.

Source: Boyd's State Directory. Delaware. 1859-1860. Page 27.

1859

Wilmington, Delaware

H. S. McComb and Brother, corner Orange and Third Streets

Wholesale dealers and Retail Dealers in all kinds of leather for shoemakers, saddlers, waterproof cemented, leather belting, all sizes, double and single width.

Source: Boyd's State Directory. Delaware. 1859-1860. Page 28.

1859

Robert H. Jones, 102 Market Street, Wilmington, Delaware

Robert H. Jones, successor to Davis and Carter, dealers in all kinds of Shoemakers and Saddlers Leather, all kinds of moroccos, belts and lace leather, tanners oil, curriers tools.

Source: Boyd's State Directory. Delaware. 1859-1860. Page 27.

Divi-divi

Divi-divi is the seed pod of a South American tree, and contains 40 to 50 per cent of tannin which lies almost entirely in the husk of the pod. It contains a large proportion of ellagitannic acid, and is somewhat similar to myrobalans but much more prone to fermentation and to sudden development of a red coloring matter. It has been reported as yielding great weights in sole butt tanning, but is used chiefly as a gambier substitute for dressing leather and for the rapid drum tannage of light leather. Antiseptics prevent to some extent its rapid fermentation.

Source: The Manufacture of Leather. Hugh Garner Bennett.
Van Nostrand, New York, N.Y. Page 1929

Valonia

Valonia is the calyx or acorn cup of the Turkish oak, though probably obtained also from other species. It grows extensively in Asia Minor and Greece. The fruit in the former district ripens in August and is gathered and forwarded to Smyrna, which gives rise to the term "Smyrna valonia." The Greek valonia is obtained from many parts of the Grecian Archipelago as well as the mainland. The best quality is obtained when the fruit is still immature and the acorn well enclosed.

Source: The Manufacture of Leather. Hugh Garner Bennett. Van Nostrand, New York, N.Y. Page 124. 1910.

Glossary of Technical Terms in Relation to the Manufacture of
Leather GoodsAging.

The process by which certain kinds of leather at some stage of manufacture are allowed to lie in piles to "age," or season. When prolonged for several weeks, as in the case of alum-tanned kid leather, this process tends to make such tannages expensive.

Alum-Tanning.

A process of tanning with alum, used in combination with salt, egg yolk, and other substances. Before the invention of the chrome-tanning process, this was the principal method of leather-making with mineral agents and was staple in the manufacture of high grade, light leathers, for women's fine gloves and fancy shoes. This process of tanning is characteristic of the so-called French kid. It has been continued to be used chiefly for glove leather, but even in that branch of the industry it has been partly driven out by the Chrome process.

Alum and Oil
Tannage.

A combination tannage used chiefly in the case of mechanical leathers and combining certain of the advantages of alum-tanning with those of dressing with animal oils.

Apron Leather.

A specialty of minor importance made chiefly of heavy sheepskins or cattle hide splits. Such leather is used for workmen's aprons and also in guards on machinery that keep materials in process from moving parts.

Baseball Leather.

The leather used for covering baseballs is made from the fronts of horsehides, also used for razor straps.

Belt Leather.

The term ordinarily used to distinguish the leather going into men's clothing, belts from belting leather, employed for the transmission of power in machinery. Belt leather is usually considered a sub-class of fancy leather. It is made of various materials, of which cattlehide splits are commonest.

Bag and Case Leather

A general term for leathers used in travelling bags and suit cases. It does not include the light leathers employed for women's fancy handbags, as the latter come under the heading of fancy leather. The staple material for bag and case leather at the present time is cowhide; but heavy sealskins, the "cow seal," and heavy goat skins are also used.

Bating.

The process preparatory to tanning proper whereby the fibres of a hide or skin which has been "plumped" or swollen by the liming process are reduced and softened, thus assuring pliability in the product. The traditional method of bating is by soaking in a solution of manure, usually either dogs' or poultry. Of later years, however, synthetic bates, equally effective and less disagreeable to use, have been generally substituted in Occidental countries.

Bleaching.

A chemical process for lightening the tint of sole-leather, which has been tanned with vegetable agents, that have, incidentally an extreme effect in dyeing the stock. Most tanning agents except alum, formaldehyde, and the marine oils have such an effect.

Boarding.

A process of finishing a side or skin by folding it with the grain side in and rubbing the surfaces together under pressure of an instrument originally known as a hand-board. Under modern conditions this is often done by machinery, and the resulting finish is also imitated by embossing.

Bookbinding Leather.

Usually regarded as a sub-class of fancy leather. Large quantities are still used, though of late years this branch of leather consumption has been much reduced by the competition of fabrics and imitations.

Clothing Leather.

Covers the material for leather coats and breeches. Leather coats are made chiefly of sheepskins, tanned either with or without the wool, or the two may be used in combination. Such woolled skins employed for clothing purposes, however, are as much furs as leather. Clothing leather includes the jerkin leather which was largely manufactured for a time during the war for the sleeveless leather coats served out to soldiers as an extra protection against cold.

Collar Leather.

The leather used for covering horse collars and sometimes regarded as a sub-class of harness leather. It is made of very light cattlehides in full thickness, or of cattle splits.

Deliming.

A process preparatory to tanning proper, which consists nowadays in washing in a drum, together with, in some cases, a bath in a weak acid solution. The object of this process is to reduce the swollen and rigid fibres of a hide or skin after liming; but the effect of deliming is less drastic and it does the work without subsequent bating

Deliming. (cont.) in addition, only in case of heavy leathers which do not have to be made specially pliable.

Drums. The collective term for the rotary vessels in which many processes of tanning are now carried out.

Facing stock. The light leather used for facing the seams and binding of shoe uppers. Nowadays such stock consists usually of light grades of leather used for the upper themselves.

Fat-Liquoring. A process or source of processes used in the finishing of leather, the object of which is to fill in the fibrous structure of a hide or skin, making it supple and plump, and to prepare the surface for receiving the final finish.

Finishing. The collective name of processes by which leather is finally prepared for use after the tanning proper has been completed. The object of these processes is partly to complete the work of making it resistant to wear and tear and to permeation by moisture, and partly to give it an attractive and distinctive appearance, the latter constituting its special finish.

Fleshing. The process of cleaning the flesh side of a hide or skin to remove the bits of muscular tissue and other waste matter which are left on after flaying. Fleshing usually follows on the dehairing, and in Occidental countries is now almost carried out by machinery.

Prising. The process of removing the grain of a skin by exposure to a strong lime liquor over an exceptionally long period, sometimes as much as eight weeks. Such skins, after tanning, are finished on the fine fibres under the grain.

- Prizing. (cont.) This is the method used in the manufacture of mocha glove leather, and of certain classes of buckskin.
- Glazed Finish. A finish produced by polishing the grain surface of a skin. Originally with a hand tool tipped with stone and known as "agate," but nowadays usually with a machine called a glazing jack, that operates an arm bearing a roller of glass or steel.
- Hydraulic Leathers. A collective term sometimes used for the cattle-hide leathers, chiefly rawhide and combination tannages, employed in pump valves, as piston packing, and so forth.
- Glove Leather. A self-explanatory term which, however, covers two rather distinct classes: 1 The leather going into utilitarian or work gloves and made of a variety of hides and skins, of which the most important are horsehides, cattlehide splits, calfskins and pigskins;² the leather going into dress gloves, including those for the street, riding, driving and sport wear. This latter is tanned from sheep and lamb skins; but there is a considerable item made of deerskin and a small one of pigskin, while an important item for the highest grades of women's fine gloves is tanned from kidskins.
- Larrigan Leathers. An American specialty made of light cattlehide and used in the manufacture of the heavy moccasins worn by lumbermen to guard against slipping when walking on wet logs.
- Lithographic Leather. A highly specialized leather tanned from the butts of very spready cattlehides, and used for covering the inkrolls of lithographic presses.

Liming.

A process preliminary to tanning, which serves one or both of two purposes: 1. to loosen the hair or wool on a hide or skin, preparatory to dehairing; and ^{2.} to plump or swell the fibres as one of the processes necessary to prepare the substance for the action of the tan liquors. Liming is always required for the latter of those purposes. Hides and skins which are prepared for dehairing by sweating or painting, therefore are also limed, but in other cases one process only is required for both purposes. The original material used in this process was slaked or hydrated lime. This is still largely employed, but its action is hastened, in a large proportion of modern tanneries, by mixing with sulphide of sodium or an arsenic salt.

Lace Leather.

The leather used for lacing together the sections of driving belts. It is often replaced by rawhide or by metal clamps. Lace leather is usually in the form of rawhide, but is sometimes prepared with an alum and oil or other combination tannage.

Latigo Leather.

The Spanish word latigo means a whiplash and this leather was originally tanned for that purpose; but as a technical term in the present-day American trade, latigo leather means the straps used for cinching saddles of the cowboy and Mexican types. This leather is usually prepared from cattlehides by a combination tannage. Whip leather, used specifically for the manufacture of whiplashes, is more commonly made of calfskins.

Napa Leather.

A cheap sheep or lambskin glove leather, made with an alum or combination tannage, and usually given a dull grain finish. The name of Napa is taken from a town in California.

Natural Finishes.

A collective name for the final surface finishes of leather that leave the grain of the hide or skin substantially in its original appearance. Such finishes are used for many utilitarian leathers, in which a distinctive and attractive appearance is of no special importance, and for the most of the rarer specialty skins, as sealskins, pigskins, alligator skins, and so on, the distinctiveness of whose grains constitute their principal attraction. A natural finish may be known by a special trade name, such as morocco or pebble grain of goatskins, or the pin grain of sealskins, and such names may be later transferred to imitations produced by embossing or other processes. On the other hand, some finishes which are known by names implying that they are natural, are really conventionalized imitations of the latter.

Oil Dressing.

The process of tanning with animal oils, which is used in the manufacture of certain soft leathers, particularly chamois (the class specially associated with the process) and certain kinds of buckskin. The oils used are derived from various marine animals, such as the whale, the seal, the shark, and certain smaller fishes. The skins to be treated, after undergoing the preparatory processes, are impregnated with the oil by beating or kneading in machines known as stocks or kickers. They are then hung close to-

Oil Dressing.(cont.)gether in a hot room and the actual tanning is accomplished through the generation of formaldehyde by the oxidation of the oil.

Painting. A process for loosening hair or wool (usually the latter) which is employed with skins whose protective covering is so valuable as to make it desirable to avoid injuring it by soaking in a lime liquor. The process is carried out by painting the flesh side of a skin with a depilatory substance, containing sodium sulphide or arsenic. This draws through the skin in a period of 6 to 18 hours and loosens the roots of the wool without affecting the body of the fibre. Nowadays, this is the usual method with sheepskins bearing the higher grades of wool. Before it was invented, such skins were usually dehaired by sweating.

Piano Leathers. A name covering several highly specialized leathers used for various purposes in the manufacture of pianos, both manual and mechanical. The details are too technical for explanation here, but these leathers fall into three main classes:^{1.} valve leather, for the valve pouches of player pianos and made of very thin and carefully selected skivers;
2. packing leather, for making the frames of player pianos air-tight, and bridle leather, for the loops that control piano actions, both of these being made of sheepskins in full thickness;^{3.}
3. a specialized variety of buckskin used for the cushions and checks in piano actions.

Leveling.

The process of shaving the flesh side of a piece of leather to produce an even thickness, when it is not worth while to take off a split by machinery. The term levelling is more commonly applied to some classes of leather, and shaving to others. Before the invention of the splitting machine, levelling or shaving by hand was the only known method of reducing the thickness of a hide or skin, as it still is where primitive tanning methods survive. Nowadays, in Occidental countries, levelling or shaving, as well as splitting, is largely done by machinery.

Rawhide.

This is the usual American name, which has spread largely to other English-speaking countries, for cattlehide that has been dehaired and limed and has sometimes undergone other preparatory processes, but that has not, in the proper sense of the word, been tanned. It cannot strictly, therefore, be called leather, but being a finished product, it is convenient to classify it under that head. Parchment and vellum are practically the same thing, but made of other classes of raw stock. Modern rawhide scarcely differs from the historical European products known in England as whiteleather. Materials of this type have been made by almost every primitive people, indeed, they are probably the oldest products of anything that can be called leather industries. "Rawhide" itself is the name given by the Western pioneers of the United States to the Indian product. The latter commended itself for frontier use by its extreme toughness and by the ease with which it could be made. Modern rawhide is a factory product used principally for mechanical purposes, for instance, belt lacings, pinions,

Rawhide.(cont.)

loom pickers, gaskets and so forth, and for such specialized non-mechanical uses, as the straps by which artificial limbs are attached.

Roller Leather.

The leather used for cots or covers of the upper rolls of cotton spinning machinery. Such leather is specially tanned from certain classes of sheep and lambskins, though a closely related variety used on the rolls of combing instead of spinning machinery is usually made of calfskins. In a century and a half of experiment no satisfactory substitute has been found for this leather, with a view to giving just the right tension to the thread passing between the rolls.

Russia Leather.

Originally and properly a calfskin shoe leather, dressed with birch oil and distinguished by its odor rather than its appearance. For a long time, however, the name has been widely used in other countries with many variations. In the United States nowadays, Russia leather is usually a fancy stock, generally made of calfskins, but to some extent of light cattle hide.

Scudding.

One of the preliminary processes preparatory to tanning whereby after bating or drenching, the excess fermenting materials, together with dirt, fatty matter, hair follicles, short hairs, and glandular tissue, are worked out of a hide or skin, and the latter is made ready for subjection to the last processes preliminary to actual tanning.

Seasoning.

A collective term for certain processes used in the finishing of leather. They consist in working various materials into the substance or surface of a tanned hide or skin with a view to making it moisture-proof, solid and smooth. The substance used and the manner of operation vary considerably.

Smuffing.

This process consists in removing a considerable part of the grain of a hide or skin after tanning by buffing on an emery wheel, after which the reduced surface is usually given a finish of the dope type by seasoning it heavily with filling material. Smuffing if not carried to an extreme, does not necessarily imply an inferior product; but it is so extensively used in the case of hides or skins of which the grain has been more or less damaged, either in the raw or in the process of tanning, that smuffed leather is often assumed to be of second grade or lower. The so-called satin finish is applied by seasoning the surface of smuffed leather.

Preliminary Processes.

A convenient collective term used occasionally in the text for the processes by which hides or skins are prepared for tanning in the strict sense. These processes comprise soaking, trimming, dehairing, fleshing, liming, deliming, bating, drenching, scudding, and pickling, all of which are defined in the glossary. Before the days of modern machinery, hides and skins used to be placed, for the performance of several of these operations, on a contrivance somewhat resembling a carpenters' horse and known as a "tanners beam." From this the building in which the

Preliminary (cont.) Preliminary Processes. preliminary processes of leather-making were performed

was (and still is) known as the beamhouse; and the processes are sometimes referred to as the beam-house processes.

Sammed.

A hide or skin on process of manufacture is said to be sammed or in a sammed condition if, after having been treated in a liquor and subsequently pressed, drained, or worked in some corresponding manner, it just exudes moisture at the crease when folded over. That a piece is in such a condition indicates its readiness to undergo some subsequent process.

Setting Out.

This mechanical process, as well as the closely similar ones known as striking-out and staking, is used at various stages in the finishing of leather to counteract the shrinking and stiffening resulting from processes that have gone before. They all involve some form of stretching and working the substance of the stock.

Smoked Finish.

An American specialty finish, apparently of Indian origin. It consists in coloring leather by hanging it in the smoke of a fire, traditionally of manure and hemlock bark. It is associated chiefly with smoked elk, which is nowadays of cattle sides.

Smooth Finishes.

A collective name for a class of closely related finishes, produced by rolling, pressing, or ironing the grain of leather without imparting a high polish. They are most commonly applied to the heavier grades of upper leathers for utilitarian shoes, particularly side leather and calf

Smooth Finishes.
(cont.)

skins. Smooth finishes are often given fancy trade names, like the well-known "gun metal" finish.

Soaking.

A self-explanatory term applied to more than one of the processes of leather manufacture, but referring oftenest to the "first soaks," wherein most classes of raw stock are subjected to prolonged action by clear water while still in the hair or wool. Such soaking is required in the case of nearly all hides and skins to cleanse them of surface impurities and curing materials; while in the case of dry stock it is necessary also to soften the flinty structure, thus permitting a hide or skin to be handled readily and to absorb the substances used in the later processes.

Spanish Grain.

The term has been used at different times to cover distinct types of finishes. Originally it meant a modified natural grain produced by drawing or striking a hide or skin in a strong tan liquor to shrink the grain, the result being the formation of a curious pattern on the surface, owing to the unequal shrinking of different portions. Nowadays, however, a Spanish grain is usually produced by embossing a definite pattern. It is applied most commonly to fancy and to upholstery leather.

Strap Leather.

A self-explanatory name for a class of leather which does not require much comment because, though used for distinct purposes, it is technically almost the same as bag and case leather, and is made, for the most part, by the same firms. Strap leather is usually held to be distinct from harness leather, because it is made of

Strap Leather.
(cont.)

lighter and smaller hides as well as by a different class of tanners; but there is little distinction between the heavier varieties and the lighter and medium weights of harness leather.

Strop Leather.

The leather of which razor straps are made. The best grades are tanned from the shells of horsehides; the poorer grades from the back strips of such hides (that is, the parts of the butts outside the shells and shanks) or from cattle hides.

Parchment.

The name parchment is a corruption of Pergamene, which means belonging to Pergamus, an ancient city of Asia Minor. The story goes that when the King of Pergamus was building a great library in rivalry with the King of Egypt at Alexandria, the latter placed an embargo on the exportation of papyrus from Egypt to hamper competition. The King of Pergamus there upon developed the manufacture of parchment for the making of books. Vellum is practically the same thing as parchment, but is made of calf-skin. The word is derived from the Latin "vitulus," a calf, whence also our word "veal." Drum leather is a specialized variety of vellum, made nowadays in diminished quantities for the purpose indicated by its name.

Pebble Grain.

An alternative trade name for the natural grain of fancy goatskin leather. It was subsequently imitated by embossing or similar processes, but is now obsolete. The name refers to the grain of a goatskin, which also explains the origin of the term itself.

Suede Finish.

The finish produced by running the surface of leather on an emery wheel, with the result of ruffling up the fibers and giving it a "nappy" appearance. The grain of leather may be suede finished, but the process is more appropriate to flesh or split surfaces. The name was applied (originally in France) to a glove leather of Swedish origin and only later to the finish that characterized this material.

Sweating.

A process for loosening the hair or wool on a hide or skin by hanging the pieces near together in a close atmosphere, thus encouraging bacterial action. The bacteria attack the roots of the hair or wool and the epidermis first so that if the process is not too prolonged, it loosens the fibres without materially damaging the substance. Before the invention of the method of dehairing by painting, sweating was the ordinary process used in the case of many cattle-hides and mostly sheepskins. It has now become comparatively rare, being confined to out-of-the-way places or primitive industries.

Tacking.

A process of stretching leather at certain stages in the manufacture by tacking it on a frame or board. The method seems crude and slow, but is very effective for counter-acting the shrinking which follows certain operations, without applying excessive strains on particular portions of a piece. It has never been wholly superseded, even in the best equipped modern tanneries.

Tanning Material.

This collective term is restricted in the trade to the various materials containing tannins which perform of

Tanning Material.
(cont.)

bark, whence vegetable-tanned leather and vegetable tan are therefore entirely distinct from numerous other substances used in leather making, but have nothing directly to do with the process of tanning proper. There is a very large variety of tanning materials. Like the tannages for which they are used they may be classified in three main groups, as of animal, vegetable, or mineral origin. The animal tanning materials are marine oils. The vegetable tannages vary widely. Those that formerly predominated in Western Europe and the United States were almost all in the form of bark, whence vegetable-tanned leather and vegetable tannages are often loosely spoken of as bark-tanned or bark tannages. The source of a majority of the more important vegetable tanning materials of the present day, however, are woods rather than barks, the more accessible and cheaper supplies of the latter having been exhausted. These woods are for the most part bought for consumption in the form of extracts. Vegetable tanning materials may take numerous other forms, as of leaves and twigs in the case of Sumac; of a gum in the case of gambier; of dried fruits or pods, and of Indian avaram and myrobalans; or the cup of an acorn in the case of the Greek valonia. These latter materials are of secondary importance, being used either for special classes of leather, like Sumac in the primitive industries, like divi-divi and valonia. Mineral tanning materials may be roughly subdivided into two groups, one consisting of alum and formaldehyde, and the other of the salts of chromium, viz. chrome tanning.

Upholstery
Leather.

A general term for leathers used to cover the cushions of furniture, carriages, and automobiles, and extended to include the materials going into the sides and tops of vehicles, when made of leather at all. Up to within recent years the term upholstery leather implied furniture leather in the case of the best grades and carriage leather in case of the cheaper. Nowadays furniture leather is of minor importance, and the consumption of carriage leather, particularly in the United States, has of course very greatly decreased. The bulk of the American upholstery leather of the present day, therefore, is used in the automobile industry. Limited quantities of furniture leather are made out of large, coarse-grained goatskins and in Europe of buffalo hides, but the staple material consists of spready cattlehides, split at least once and in many cases two or three times. The top or grain cuts go into the higher grades, and the splits into the cheaper.

Source: Hides and Skins. John R. Arnold. A. W. Shaw Co. Chicago and New York. Pages 543 to 564. 1925.

1829 to 1928

The leather industries of Wilmington have been appreciable. Some of the pioneers in this line, not including the earliest tanners, were William Robinson, 1829; Lewis C. England, 1835; James Scott, Israel Pusey and William Marr in 1845; of the Pusey and Scott Company which in 1890, passed to the American Leather Company; Thomas H. Baynard and John Parsons, 1850; Stephen Postles, 1853; James S. Dobb, 1885; the steps in the development of the American Leather Company was organized in 1891. Thomas H. Baynard, 1858 in partnership with Washington Jones, in the leather business which in later decades traded in Mr. Jones' name; William Bush and G. T. Clark, 1858, in the Barr and Dougherty morocco leather business of a later decade; Waltritz, Baird and Taylor, 1865 in Charles Baird and Company, Cyrus and William Pyle, Edwin A. Wilson and James Webb 1884, in the firm chartered in 1895, as C. and J. Pyle; Wiggley and Eullen who sold to Daniel Pierson, Jr. in 1889, and later to F. Blumenthal and Company in 1891, Joseph B. William C. and J. B. Blatz, during the present century, building the business to its present magnitude in the Amalgamated Leather Company. Peter J. and Thomas Ford, founders of the Ford Morocco Company in 1896, Elmer E. Mitchell, Robert W. Tadman and Frank H. Thomas conducting a partnership, from 1888 to 1894, when it passed to Mitchell and Thomas, Mr. Tadman joining James B. Hickman in 1896, in organizing the business which became the Wilmington and Brandywine Leather Company in 1901; Richard Patzowsky who was with Blumenthal Company from 1893 to 1900, and then started another business incorporated as the New Castle Leather Company in 1903. John G. Baker, 1867; The Beadenkopf brothers, from the

seventies; Robert H. Jones and William Richman, 1875. Jeremiah Mahoney, 1879, for some years, William J. McClary, who built the morocco leather factory in 1881, that passed to the United Leather Company; William B. Clark, 1887, founder of the Continental Company in 1903; Charles E. Fritz, William V. Bond and George W. Chambers, 1877 at the address now occupied by the Coxe and Lloyd Leather Company; Charles and William C. Corey, who founded the Delaware Leather Company in 1904. Several of the old leather companies are continued in the important establishments of the present.

According to the statistics of production, published by the United States Department of Commerce in 1920, leather is the principal industry of Delaware. The Wilmington leather companies of 1928, are as follows; The Amalgamated Leather Companies Incorporated, southeast corner of Adams and Lancaster Avenues; Beadenkopf Leather Company; The Cella Leather Company, 12 East Second Street; The Coxe and Lloyd Leather Company, 211 West Third Street; Nowak and Schwartz Leather^{Co.} 110-114 Walnut Street; Standard Kid Manufacturing Company, 720-738 West Fourth Street, corner Monroe Street; American Morocco Company, 178 West Sixth Street; James B. Stuart 202 West Fifth Street; Delaware Leather Company headed by W. C. Corey.

Source: Bevan's History of Delaware. Vol. 2. Pages 829-830. 1929.

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