

Industry becomes the Major Employment in New Castle

Shipping >1664 English Took Over; Ships by law went first to NY
>1682 Penn Arrived; Commerce on the river went to PHL

Law >1777 British Invasion; General Assembly -> Dover
1880 State Courts, county offices -> Wilmington

Transportation

NC was a transit hub since colonial days for Boston->NY -> PHL -> **NC** ->Baltimore ->DC
NC & FT Turnpike Co. (Competition: C&D Canal 1829)
NC & FT RR 1832 (Bypassed by PHL, Wilm. & Baltimore RR 1839)

Industries came and went: manufacturers of railroad engines, iron pipe, anchors, hardened steel for railroad switches and brakes, cotton and woolen fibers and cloth, flour mill, illuminating gas, gloves, shirts, umbrellas, artillery shells, rayon fabric, vulcanized fiber, bulk polypropelene for bottles etc. AN INDUSTRIAL TOWN!! They brought people and jobs. When the jobs disappeared, so did the people. Limited lifetime of companies same as today.

Shopping area

NC stores served the town and surrounding area (less over time) and employed locals.

The Trolley came in 1896, a two edged sword:

Workers and shoppers could commute to Wilmington. Cars continued the trend.

Industry in Historic New Castle??

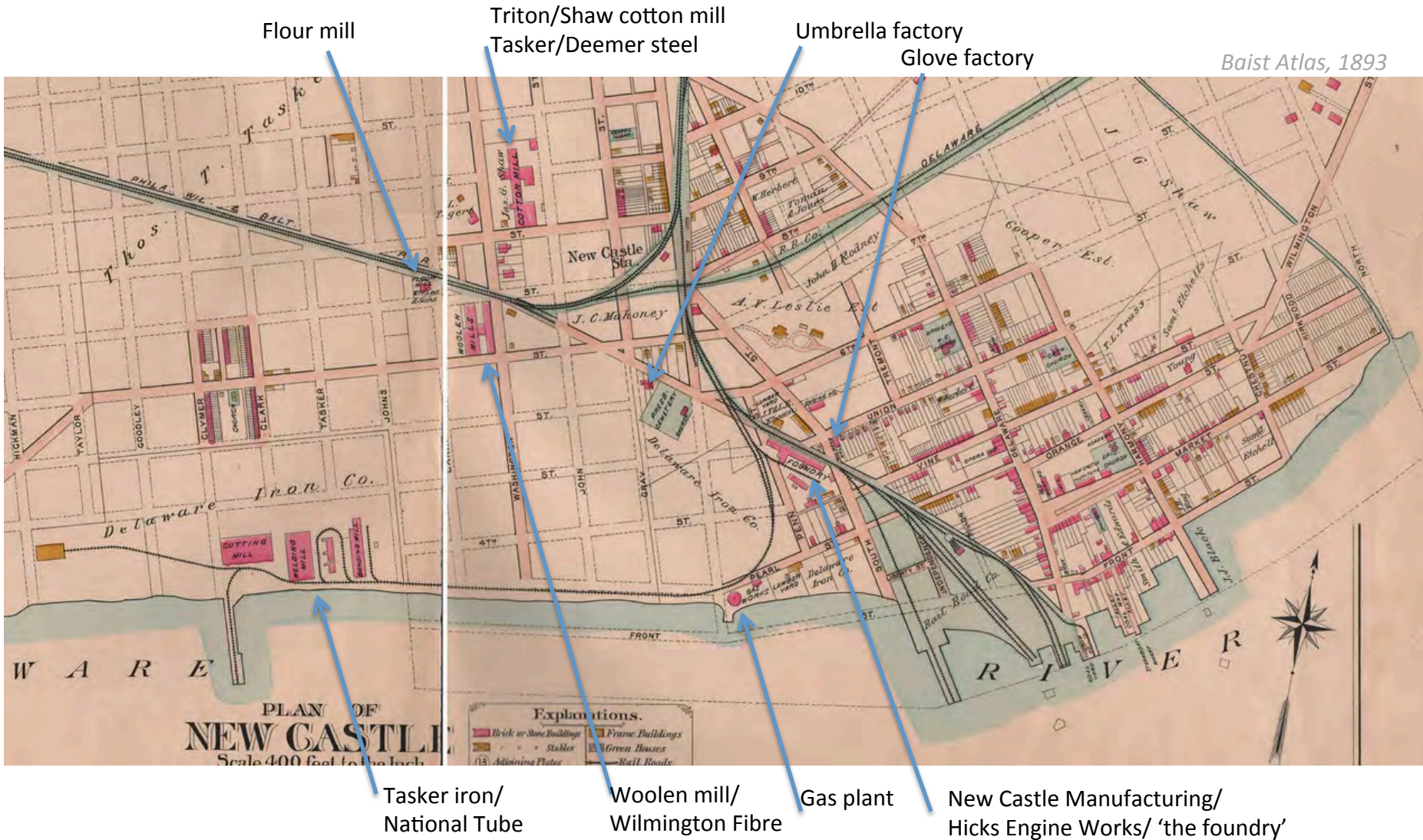
1926 View (and now??) -- it's somehow invisible

THERE are few communities to-day which have retained their early American flavor as completely as has New Castle, Delaware...

While there are some factories with their resultant nondescript housing, they are all grouped near the branch-line railroad which comes in to the west of the town proper. The compact older portion is still complete and removed from too much "progress."

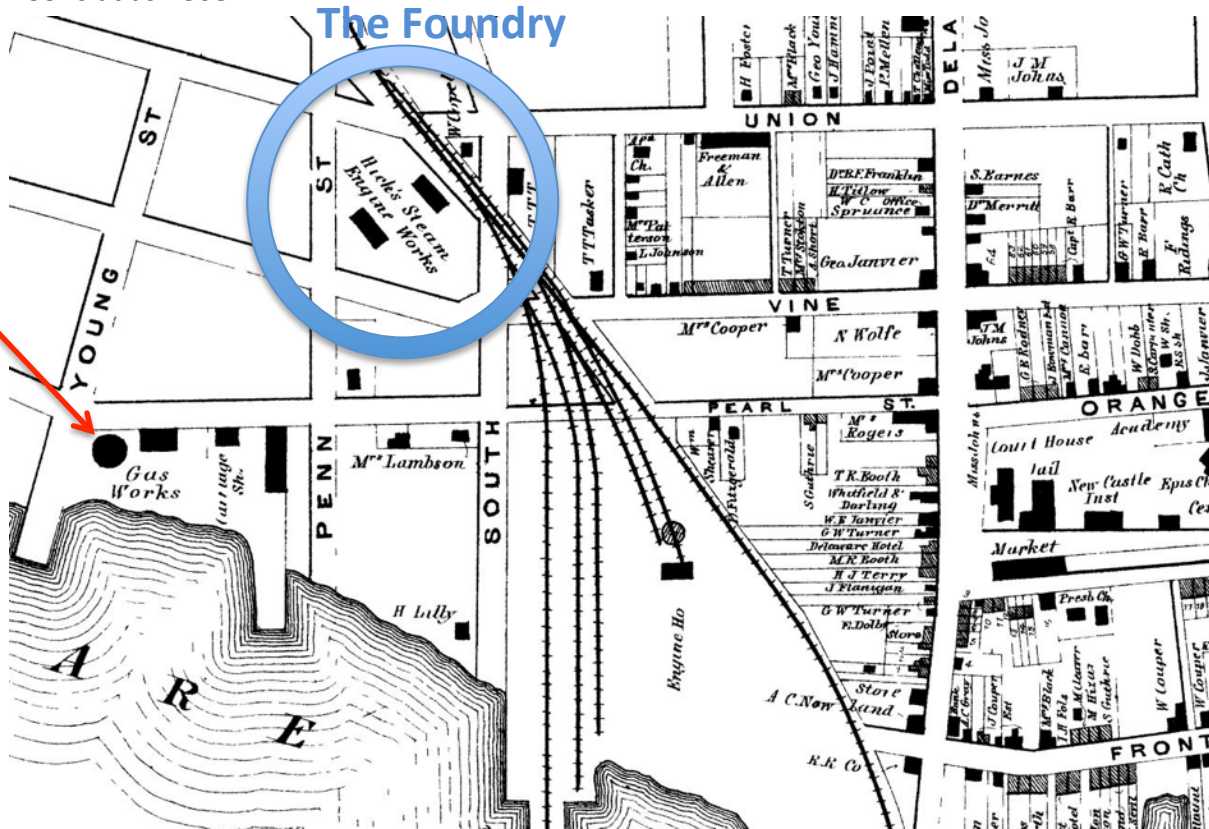
NEW CASTLE, DELAWARE an EIGHTEENTH-CENTURY Town
Wm. D. FOSTER White Pine Series of Architectural Monographs

Industrial sites in New Castle before 1900



The First Heavy Industry in New Castle: New Castle Manufacturing Company/Hicks Engine Works

Beer's atlas 1868



Initially not for engines: founded in 1833 for cotton, wool, grain, plaster of Paris...

In 1837 the company started to make engines on contract to RR.



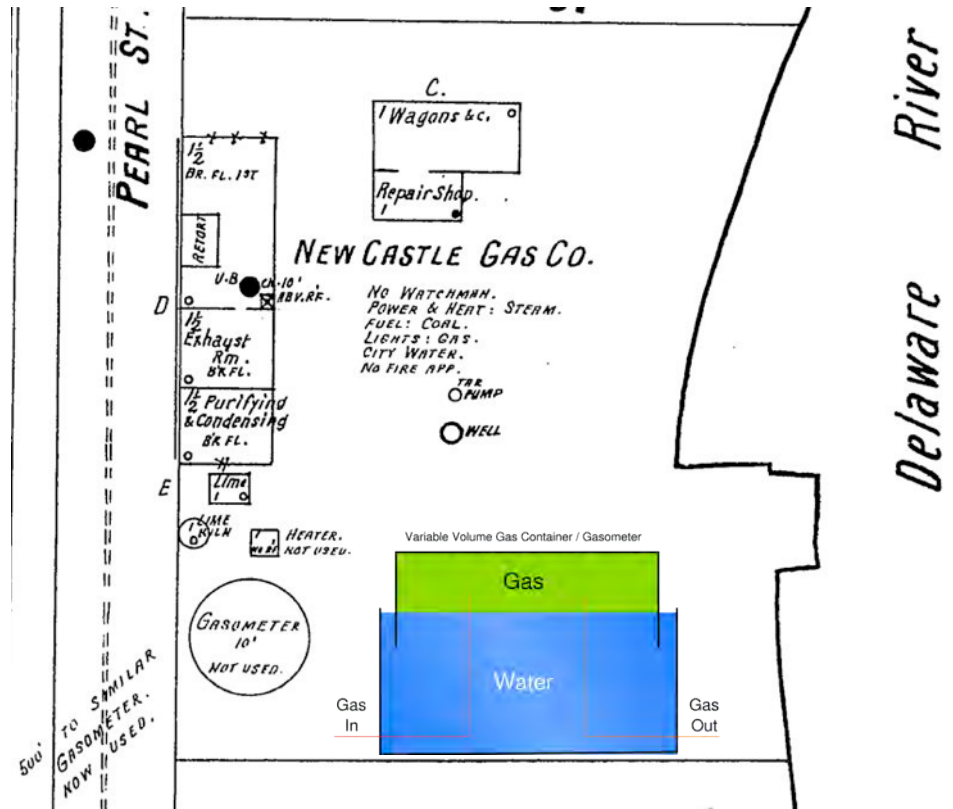
The only surviving engine built in New Castle is the 1848 'Memnon', #57, now in the B&O museum in Baltimore. It was built to haul coal in WVA, then used to haul troops for the North in the civil war.

New Castle Gas Co

1857-1918.

Thermal decomposition of coal -> methane, hydrogen, carbon monoxide, tar

- A pier gave easy access to the raw material, coal.
- Byproduct (tar) could be pumped into the well (!).
- Gas could be pumped into a nearby 'gasometer', a storage device with a floating lid which provided absolutely constant gas pressure (important for distribution into nearby houses).

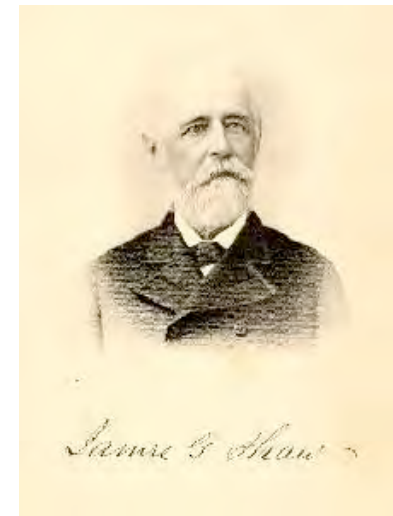


Triton Cotton Mill (later Deemer Steel)

c1861-1900, Washington St., Shawtown

From Speculator (1860) to Plant Owner and Developer

321 Brumfield	Mary	14 F	VPa			
321 Reynolds	Andrew C	48 M	VDel	Dentist		
321 McClain	Edward	32 M	VPa	Clerk		
321 Evans	John	23 M	VDel	Commision Merchant		
321 Caussey	William	23 M	VDel	Lawyer		1,000
321 Cann	William	28 M	VDel	Merchant	2,000	4,000
321 Shaw	James G	30 M	VPa	Speculator	10,000	5,000
321 Plesants	Charles F	28 M	VPa	Clerk		
321 Hartis	George	40 M	VEngland	Ostler		
321 Hartis	Ann	25 F	VEngland	Domestic		
321 Holladay	Sarah	18 F	Wreland	Domestic		
321 Miller	David	18 M	MDel	Servant		

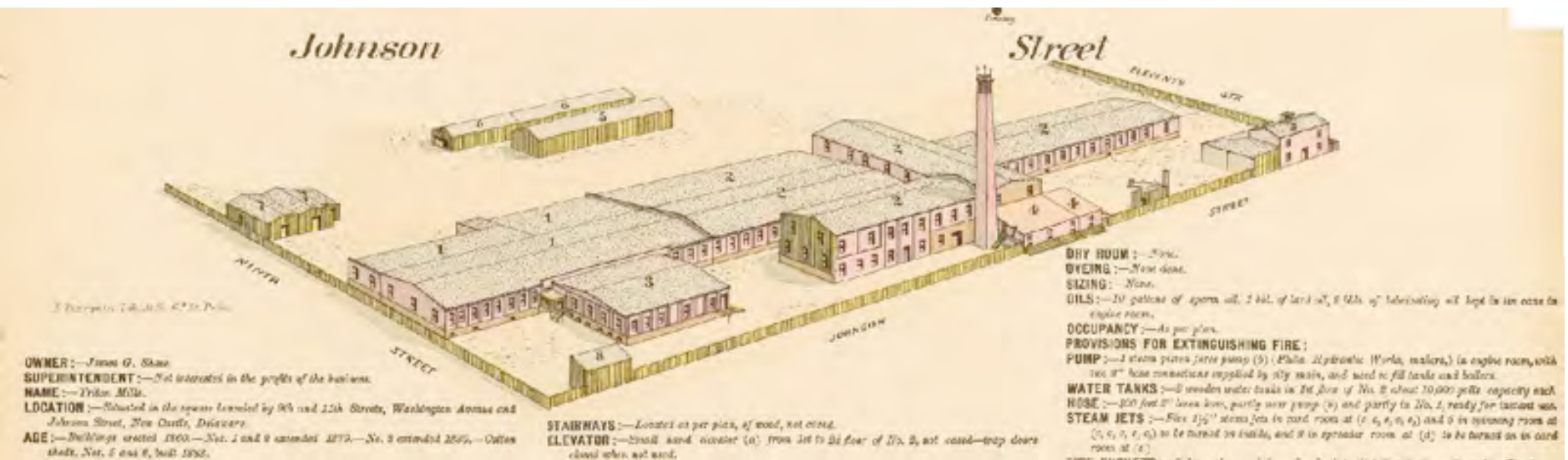


In 1857 he moved to NC and bought land west of town (including Shawtown) – former Kensey Johns farm.

In 1860 he built a cotton yarn factory to be run by a Boston co. But the civil war...

Triton Cotton Mill/Deemer Steel

After the war, Shaw bought cotton fiber machinery himself, joined with an experienced partner, James Knowles and started Triton Mills, which lasted until the 1880's. At one time he was the largest employer in town.



Occupations in the Town of New Castle (1870)

In 1870, working in a cotton mill (presumably Triton Mill, founded c1861) was the third most common paid occupation, after laborer and domestic (not counting 'at home' and 'without occupation')

There were 151 occupations listed. One person each was a gold beater, telegraph operator, sail maker, watch repairer, book gilder, cigar maker, hedger, distiller

Around 1880 Triton Mills closed – put out of business by competition with mills in the South much closer to the source of the cotton.

OCCUPATION (1870)	Number	Real Value (Avg)	Personal Value (Avg)
At Home	736		
Keeping House	343	9,177	1,955
Without occupation	160	16,422	8,136
Laborer	123	1,028	143
Domestic	92	1,000	
Works in Cotton Mill	84		125
Carpenter	28	1,625	276
Farmer	19	17,214	4,573
Blacksmith	12	1,700	335
At School	11		
Machinist	11	6,750	856
Hotel Keeper	10	4,200	593
Clerk in Store	9	1,000	200
Works on Farm	8	750	133
Gardener	7	1,133	130
Lawyer	7	14,200	23,028
Ostler	7	1,500	200
Sailor	7	1,000	40

By 1910, Triton Mill had been converted to the Deemer Steel Casting Company.

Four of the 6 steel works in Delaware in 1910 Were in New Castle

(Directory of the Iron and Steel Works of the United States)

DELAWARE.

Balddt (The) Steel Company, New Castle. Acid open-hearth castings for locomotives, ships, ordnance, electrical work, etc.—*Page 320.*

Brylgon Steel Casting Company, New Castle. Bookwalter machinery, electric motors, generators, and other steel castings; also high and low carbon, manganese, and titanium steel castings.—*Pages 320-21.*

Deemer Steel Casting Company, New Castle. Steel castings by the Paxson-Deemer process.—*New.*

Diamond State Steel Works, Wilmington. Acid and basic open-hearth steel castings for their own use.—*Idle and for sale. See page 321.*

Lobdell Car Wheel Company, Wilmington. Building; acid open-hearth steel castings for the use of the company and for sale. Also makes cast-iron car wheels, chilled rolls, and machinery castings.—*New.*

Tropenas Steel Company, New Castle. Tropenas castings for automobiles; also manganese steel castings for crushers, safes, and railroad purposes; also vanadium, chrome, and nickel steel castings.—*Page 322.*

MARYLAND.

Powers (The James F.) Foundry Company, Elkton. Machinery steel castings by the Paxson-Deemer process; also alloyed castings.—*New.*

DISTRICT OF COLUMBIA.

Naval Gun Factory, United States Navy Yard, Washington. Tropenas steel castings for ordnance for the Navy.—*See page 324.*

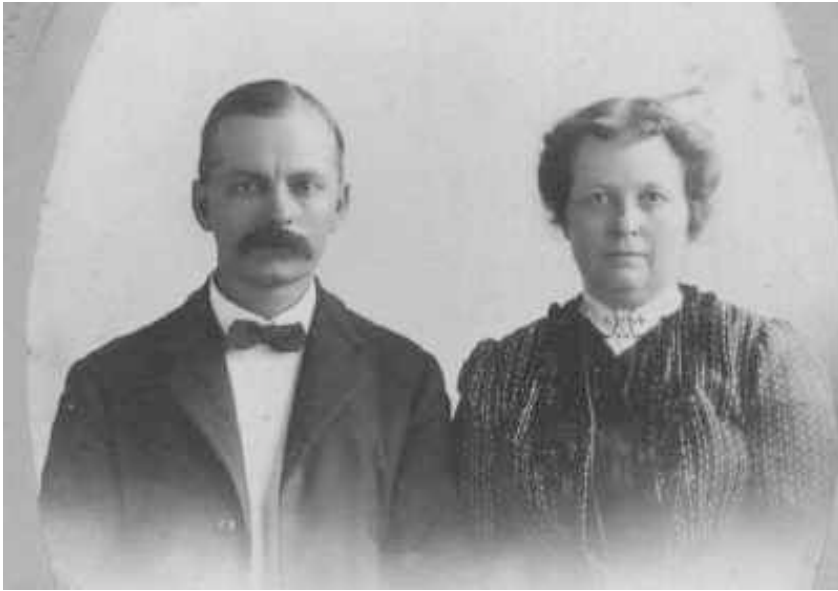
VIRGINIA.

Newport News Shipbuilding and Dry Dock Company, New York. Works at Newport News, Va. Tropenas steel castings for ship fittings for the company's use; also steel castings for sale.—*Page 329.*

WEST VIRGINIA.

West Virginia Malleable Iron Company, Point Pleasant. Malleable castings but can make open-hearth steel castings.—*See page 333.*

Wheeling Mold and Foundry Company, Wheeling. Acid open-hearth steel rolls and rolling mill and other heavy castings; also gray iron rolling mill, machinery, chilled rolls, and other heavy castings.—*New.*

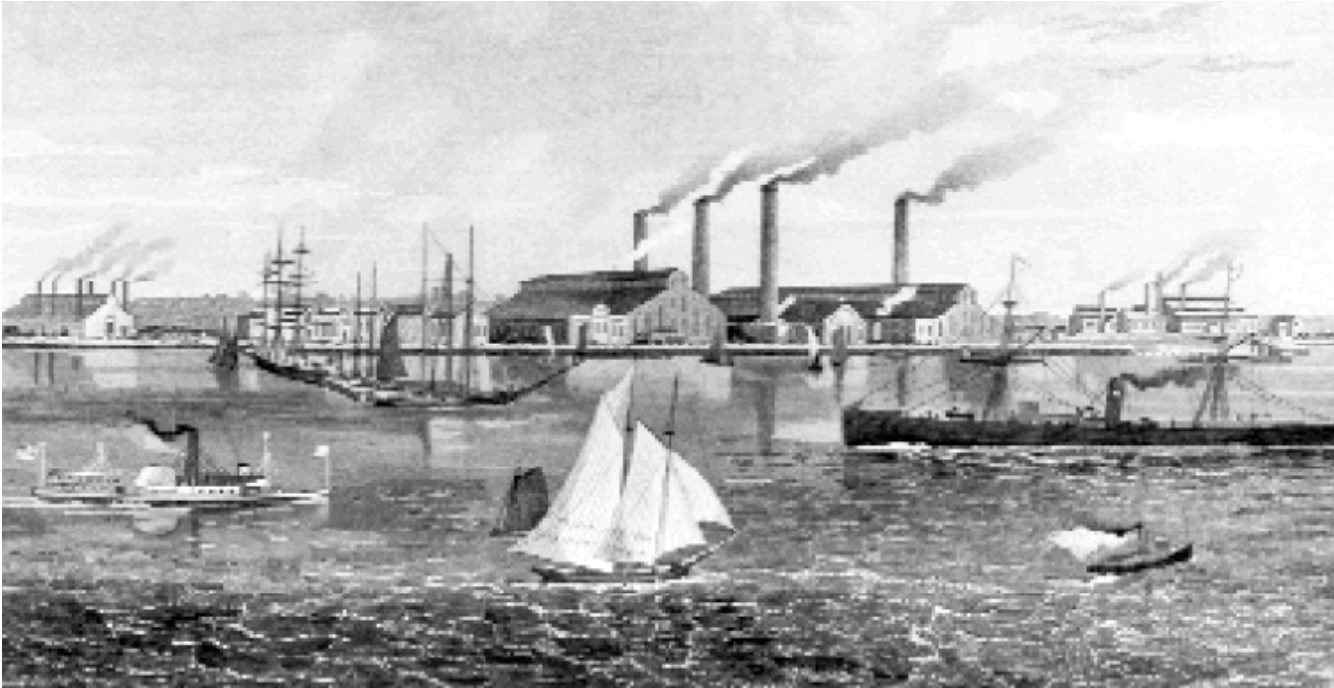


Portrait c1900 of Selden Scranton Deemer (1861-1934) and Kate Deemer. He had been superintendant of Brylgon Steel Casting Co, built 1903. He lived in the Lesley/Deemer mansion.



After his death, the mill was sold to Newlin Booth

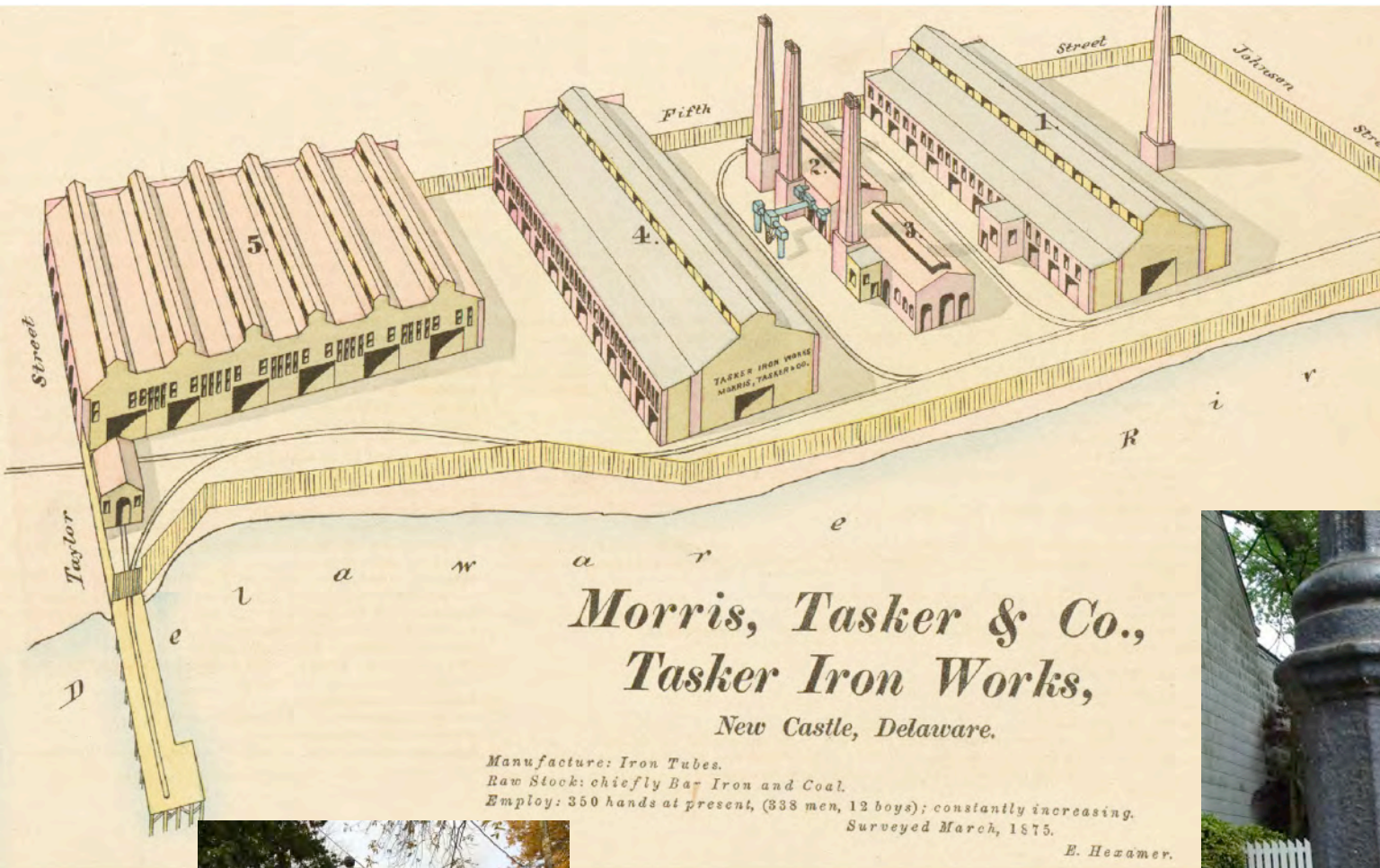
Tasker Iron Works (1872)



Dobbinsville

Tasker Iron Works

The land was originally granted by Penn to cousin William Markham, and called "Markham's Hope". Recall that he was fired by Penn c1701 because of the problems of piracy in the colony.



Manufactured iron tube, employed 283 men 12 boys in 1875



Last remaining gas light fixture:
near Dutch House on E 2nd



In 1864 Shaw sold land between the river and Triton Mills to Thomas Tasker who was one of the owners of the Morris Tasker Iron Works in Philadelphia.

In 1872 Tasker moved most of his plant to Delaware (same name). It was reincorporated as Delaware Iron in 1876 with his son as president.

About 1899 it became part of National Tube Company, a “Trust” -- a corporate monopoly organized in order to eliminate competition.

The company closed in 1900 and all assets were removed.

Workers in nearby Dobbinsville left.

Then new life when Baldt, Brylgon, Deemer & Edgar Allen steel mills opened nearby.

WILMINGTON, DEL., SUNDAY, JULY 3, 1910.

New Lease on Life of Dobbinsville, Delaware's Deserted Village

Some of the Ruins in Village Just Below New Castle, Have Been Restored—Thirty Families Now Living There—The Story of Dobbinsville

The devastation of Dobbinsville, like "Sweet-Auburn," the deserted village of Goldsmith's poem, was due to "trade's unfeeling train. But unlike Auburn, which, to use the poet's words, "when once destroyed, can never be supplied," Dobbinsville is taking a new lease on life.

Dobbinsville is a group of about 100 two-story houses, built in rows, and therefore, resembling a miniature city more than a village, about a half mile south of the centre of New Castle, Delaware. In 1872-3, when Thomas T. Tasker and Henry G. Morris removed a part of the well-known Paschal Iron Works, of Philadelphia, to New Castle, there was naturally an influx of iron workers to the little historical town. Perhaps a thousand men were employed by this new industry, known as the Morris-Tasker Iron Works. Alexander B. Cooper, in his history of New Castle, records that: "In order to accommodate these people with houses convenient to their work, Richard J. Dobbins, a wealthy contractor and builder, of Philadelphia, about the time the plant was started, bought the land and erected thereon about 100 small two-story brick houses, adjacent to the works." These dwellings were arranged in five rows each of 14 to 21 houses extending from either side of Seventh street, two rows along Clark street, two along Clymer street, and the fifth row along Dobbins street, a small street between Clark and Clymer.

Dobbinsville's Better Days.
 As soon as the houses were completed they were occupied by the iron workers.

times crowded into a single little four-roomed house. No correct figures as to the population of Dobbinsville at the height of its better days were ever obtained, but there were probably anywhere from 500 to 1,000 inhabitants.

Nothing disturbed the general prosperity of this little city as long as the Morris-Tasker Iron Works continued operations. The change of name to the Delaware Iron Company was only an incident in the life of Dobbinsville. But, when, in 1899, the Delaware Iron Company became a part of the gigantic trust of pipe and tube companies, the doom of Dobbinsville was sealed. The New Castle plant was closed down, and there being no signs of livelihood open to the three or four hundred workmen formerly employed at the iron works, they gradually departed, taking their families with them.

No Signs of Human Life.

For a short time after the departure of the workmen from Dobbinsville, the little houses were kept in first-class order, for there was always the possibility of the iron works starting up again. But after several years of vain waiting, all hope of the re-opening of the plant was given up. And in the meantime, the five rows of houses that made up Dobbinsville, through lack of use, and neglect, gradually went to decay. Shutters, doors and window sashes were blown by the wind and battered by rain until they tottered down. The steps to the dwellings rotted away, the cellars filled with water, leaking roofs and open shutters let the rain inside, and slowly but surely, the little houses have taken on the appearance of old time ruins. Weeds and rank vegetation have



HOW THE BACKS OF THE HOUSES LOOK NOW.



COWS PASTURING IN DOBBINS STREET.



UNINHABITED HOUSES NEXT TO DELAPIDATED ONES ON CLYMER ST.



UNINHABITED HOUSES NEXT TO DELAPIDATED ONES ON CLYMER ST.



THE UNINHABITED ROW ON CLARK STREET.

the greater number were taken by American workmen and their families, at the Poles and other foreigners centered in Dobbins street. Here, it is said, from five to ten families were some-

times hidden the brick pavements laid down when the houses were new. In Dobbins street and in Clark street west of Seventh the cows are pastured. In

All that part of Dobbinsville west of Clark street, east of Seventh, and his brother, Thomas Leonard, also purchased several of the houses on the eastern part of Clymer street.

Making a New Start.
 In the section of the little village east of Seventh street, however, a new life is springing up. Mr. Dobbins, the builder, had, in recent years, been willing to dispose of his houses, which originally cost perhaps \$800 apiece, at a figure much lower, but no buyers appeared. About four years ago, however, Patrick J. Leonard bought a row of the houses on

Clark street, east of Seventh, and his brother, Thomas Leonard, also purchased several of the houses on the eastern part of Clymer street. The houses bought by the Leonards have been put in good repair and gradually, one or two families at a time, they have been occupied again.

Along Clark street the whole row is occupied, and with curtains and shades at the windows, the pavements reclaimed, children on the door steps, and cheerful lights streaming out through the windows at night, the street takes on the

appearance of a new little town, and the shutters, doors, and steps, have converted the

homes for a number of New Castle's workmen. Perhaps thirty families are now living in Dobbinsville.

New Life Due to Steel Works.
 And the rehabilitation of Dobbinsville, is, strangely enough, as showing the progress of the times, due in a large measure, not to an iron works, through which it first had its being, but to the influx of toilers in New Castle's four new steel plants. The Baldt, the Brylgow, the Deener and the Edgar Allen Company. Between 500 to 700, or even more, men

these great plants, and the workmen and their families will eventually return to Dobbinsville. The houses are there, and for a much smaller sum than it would take to build new ones, the old ones will be restored to their original condition. Then the streets and pavements will once more be laid out, the cows driven off their pasturage along the grassy streets, and Dobbinsville, in conformance to the words of the poet "when once destroyed, can never be supplied" will again spring up as an active and important settlement in the life of the State.

Industry South of New Castle, 1926

Future site of Amoco polypropylene factory
Built c1961, exploded October 22, 1980

Tasker Iron/ National Tube Co.,
Dobbinsville



Bethlehem Steel (artillery shells), Delaware Rayon, Printpack

(Deemers Beach)

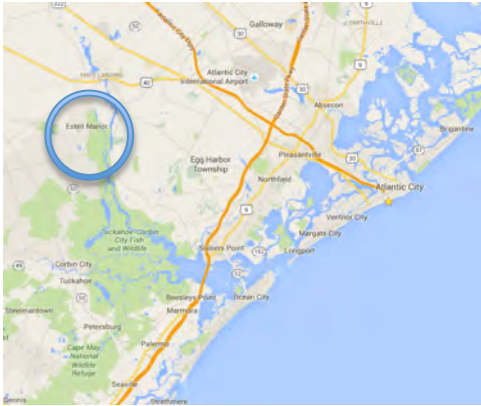
Bethlehem Loading Company (1914—1919)

The factory loaded artillery shells. It was established before the U.S. entry into the war (1917).



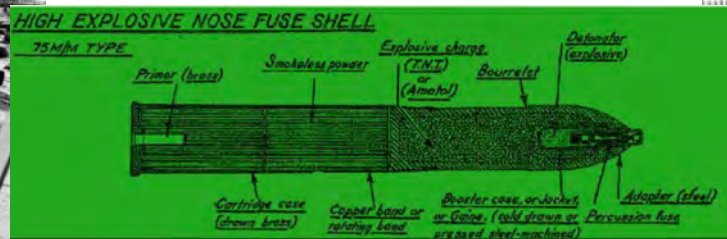
We can learn about the layout and functions of the buildings from a similar plant in New Jersey (1917-1918)

Estell Manor State Park, Mays Landing NJ — Site of Bethlehem Loading Co.



Bethlehem Loading Co, Mays Landing plant was one of 14 built nationwide. It employed up to 2000 people, and had loaded 134,000 shells before the war ended in Armistice Day, 1918.

The plant assembled the parts of 3,6, and 8 inch shells and filled them with molten TNT. Buildings were connected by trains which carried parts and finished shells.



What size shells were made in New Castle? Howitzers or mortars?

Howitzers are medium to large cannon which fires a shell in a high curving trajectory a long distance, mortars are smaller and shoot more vertically, a much shorter distance



Bethlehem Steel folders at Hagley show howitzers similar to these, but no text or details.

Workers at the Bethlehem plant lived in New Castle.

-- recollection from Frances Haut, age 99, interviewed at Methodist Country Home

- The "Canary Cottage" near Witt's Bakery on Delaware. Rooming house for girls named not for color of the house, but their tongues from working in explosive plant?
- Candy for children at Christmas at the Deemer Mansion
- Beach parties with bonfires from the driftwood (sometimes 4 fires at a time) were not only for dating but for families -- everybody from children to grandparents. Everybody off the beach by 10 pm.

Bethlehem Steel, Delaware Rayon, Printpack

The Grantham Lane Industrial Site Still Active After 100 Years

1914-1919	Bethlehem Loading Co
1919-1926	Plant closed
1926-1946	Delaware Rayon
1946-1953	Mohawk Carpet –rayon carpet
1953-1959	Plant closed
1959-1967	American Viscose – cast/ extruded films
1967-1973	Amoco - same
1973-1986	Crown Zellerbach– same
1986-1996	James River – same
1996- present	Printpack Inc –films used in packaging

Delaware Rayon (1928)



Printpack Inc (~1993)



Two other active industrial sites: Woolen Mill/Wilmington Fibre,
Bald Steel/Speakman co.

Printpack Inc.

Grantham Lane & River Rd.

Produces extruded plastic film, prints on it, and delivers it to the product manufacturer.



At the other end of Grantham Lane, Grantham House, National Historic Register, roof of front section collapsing, surrounded by refrigerators and cars, adjacent to a junkyard and marshes. Early settler (c1700?), sons fought in Rev. War



The Umbrella Factory

425 Umbrella Row (a.k.a Gray St).

between the Presbyterian Cemetery & former Gambacorta car dealerships



Built c1880 by A. V. Lesley as an umbrella factory, but lasted only a short time. Converted to four houses (two since demolished).

The adjacent “rural cemetery” was once only accessible by rail!

This street was the subject of a prominent 1991 lawsuit between B&E and John DiMondi



New Castle Cotton
Glove Factory
(c1895?)

&

Shirt Factory



HOMES OF J. T. AND L. E. ELIASON.
VIEW ALONG FIFTH STREET, LOOKING NORTH FROM SOUTH STREET

Multi purpose: glove factory, newspaper, fire hall, Red Men's hall

From Ideal New Castle, 1899, Commercial Club

INDUCEMENTS TO MANUFACTURERS.

Beautiful sites. Free land.
Exemption from taxes for ten years. Ample wharfage with deep water.
Cheap labor.
Excellent transportation facilities, both by rail and water.
Low tax rate. Good telephone and telegraph service. Delightful climate.
Trolley line to Wilmington, both passengers and freight carried.
Cool summers. Pure water. A healthy city.
Raw material near at hand. Cheap freights
Both electricity and gas available.

June 2, 1903 Agreement between Trustees & Baldt Steel

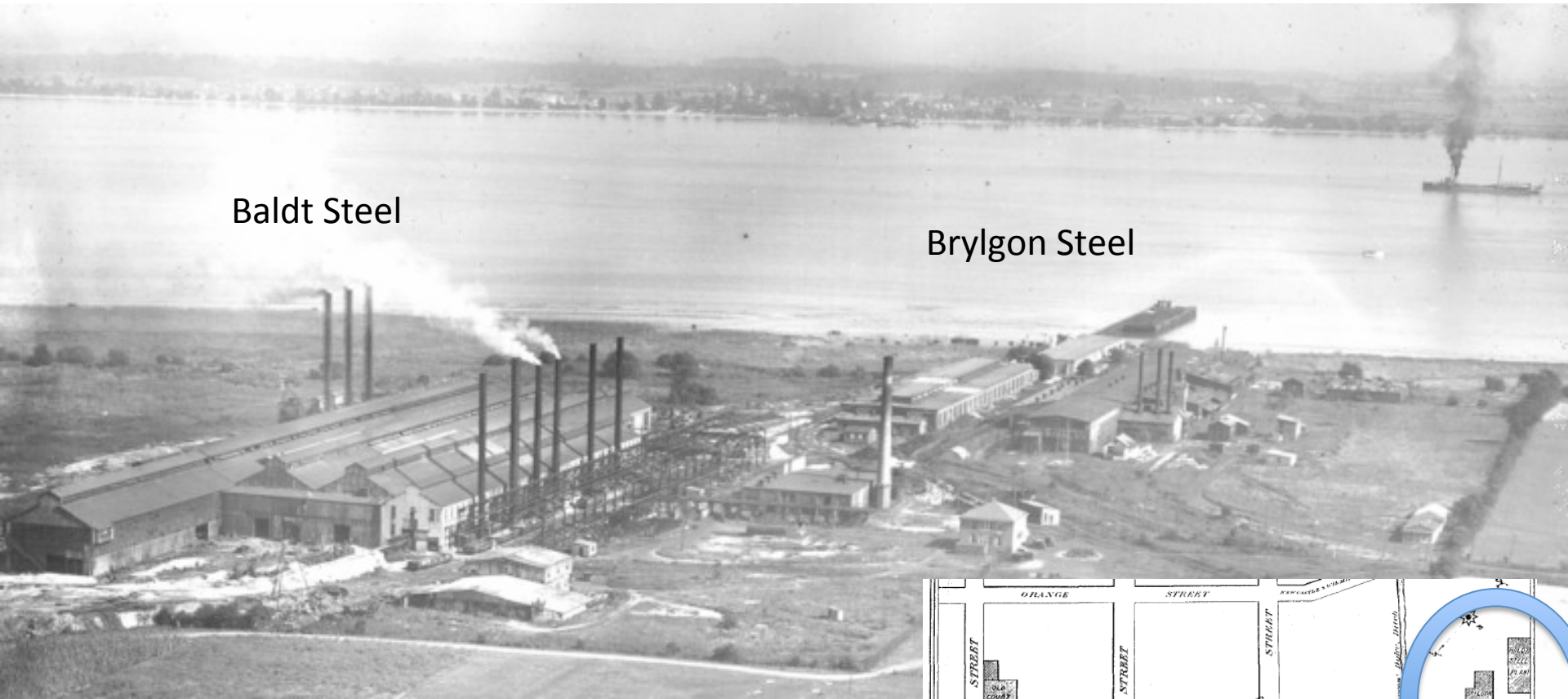
“Whereas the said Trustees are willing and desirous of facilitating and assisting in the establishment of said industry and company,

Baldt erect an open hearth steel plant costing \$200,000 on land purchased from Francis Janvier, a Trustee

The Trustees will pay \$6,000 in installments

Whereas, owing to the abandonment of many of the manufacturing interests of the City, the City of New Castle has for some years been in an unfortunate financial and industrial condition, whereby many inhabitants of the City have been unable to obtain employment and the welfare of the whole City materially injured; ...

North of New Castle (adjacent to Glebe & Cemetery)

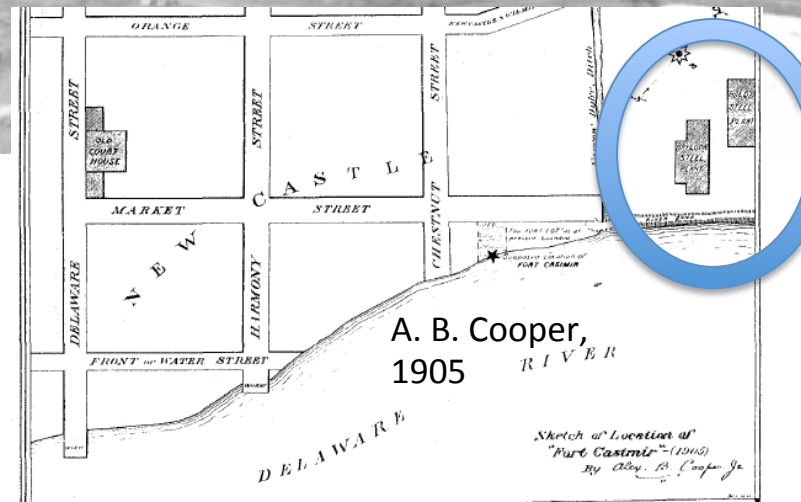


Baldt Steel

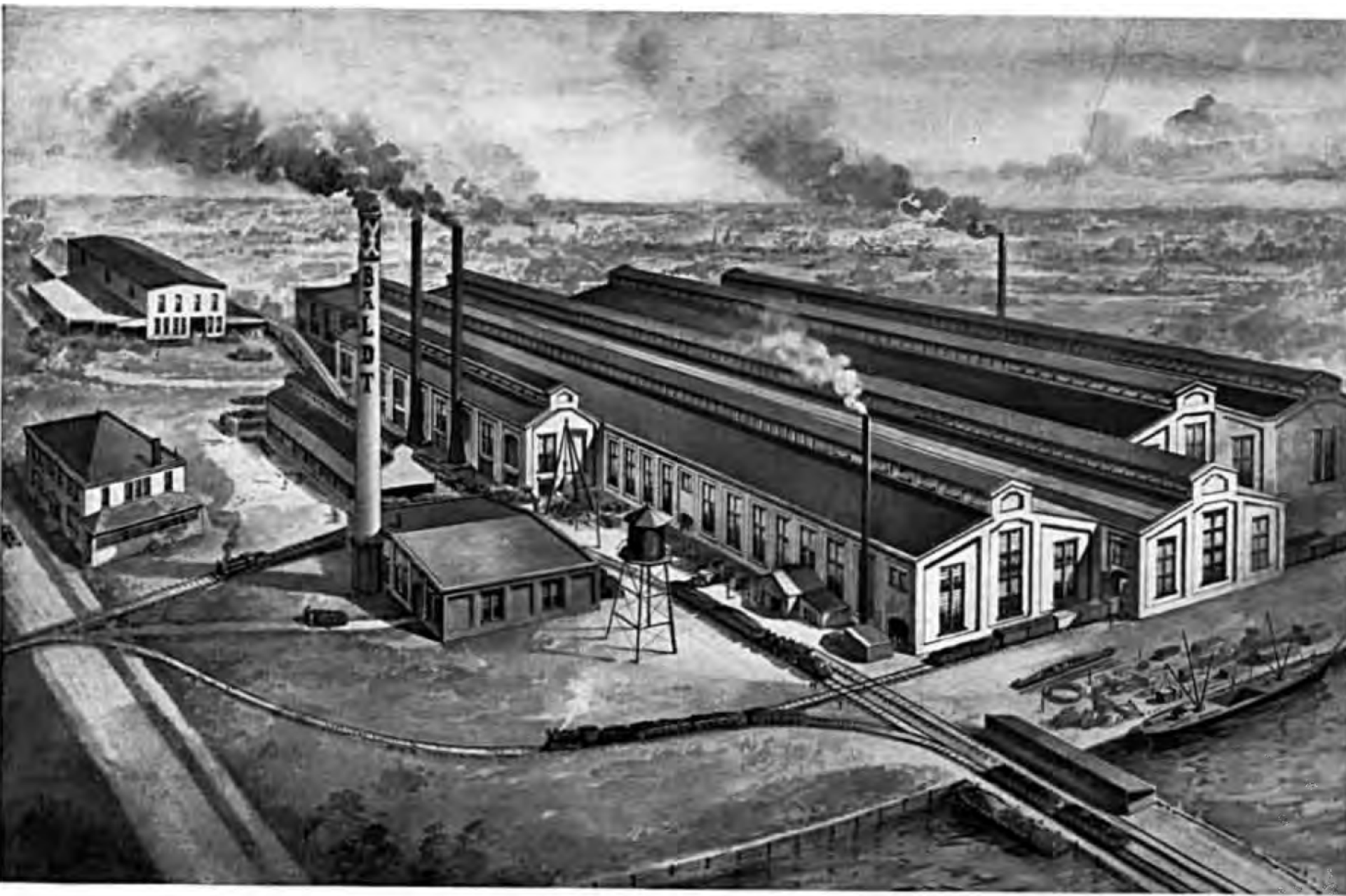
Brylgon Steel



These companies and others merged c1916 to form the Penn Seaboard Steel Co.



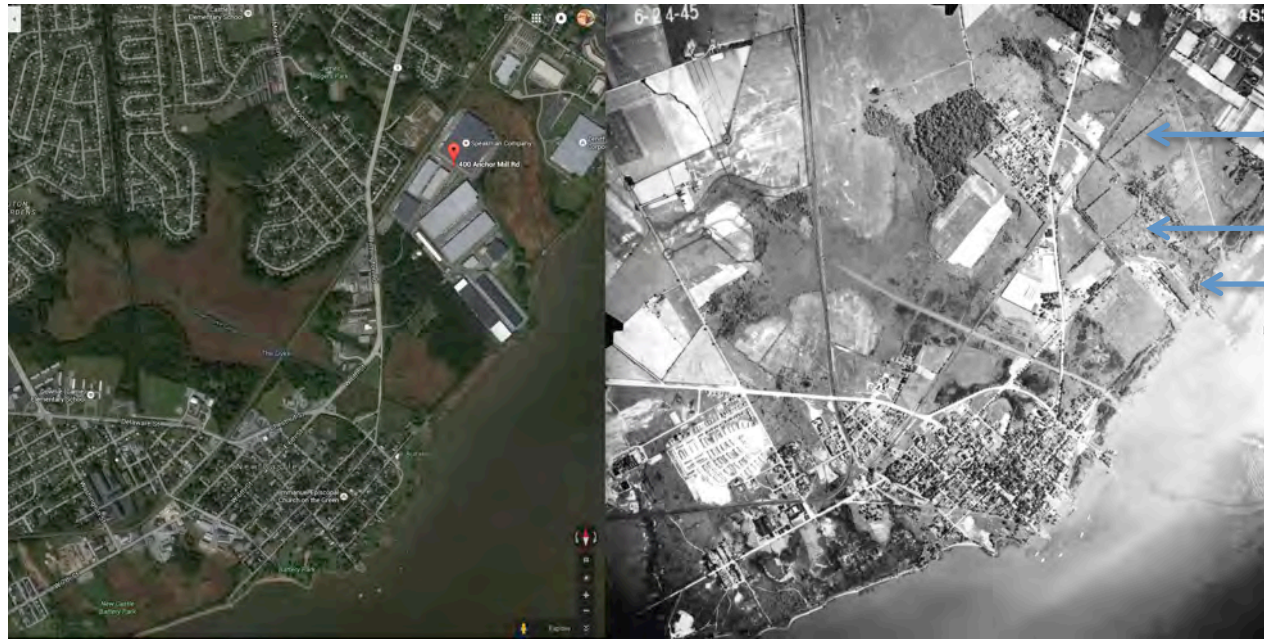
A. B. Cooper, 1905



BALDT STEEL COMPANY.

Speakman Co,

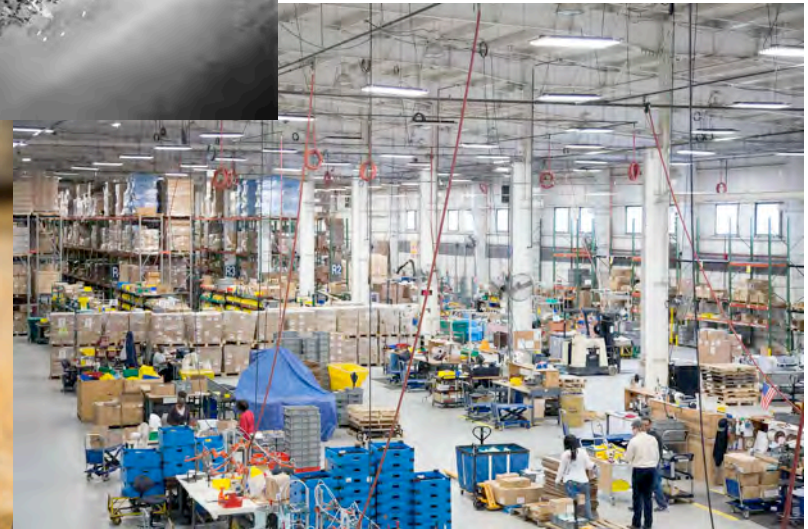
Founded 1869; recently moved from 30th St., Wilmington to the Baldt/Brylgon site in Twin Spans area. Employs > 100 workers. Manufactures plumbing fixtures
Some onsite manufacturing, mostly assembly of materials from China.



Speakman Co.

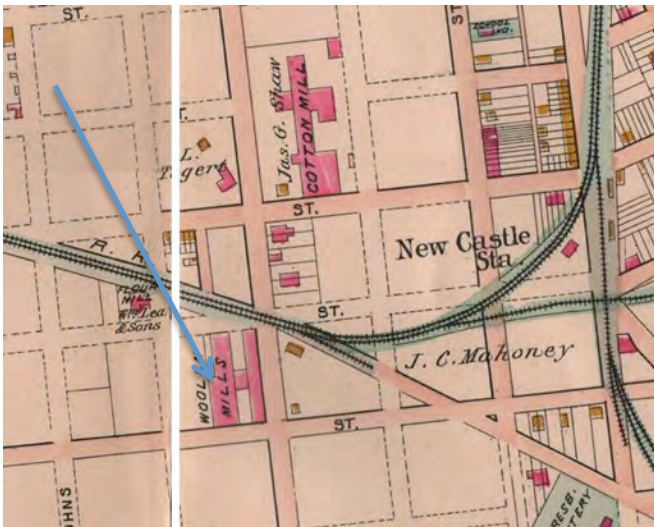
Baldt Steel

Brylgon Steel



Wilmington Fibre Specialty Co.

Along with Printpack, the last manufacturing companies in New Castle



- 1904 Founded in Wilmington
- 1920 Moved to New Castle, made fibre parts like gaskets.
- 1970s Began fabricating plastic products like guitar picks

Industry South of New Castle, 1926

Future site of Amoco polypropylene factory
Built c1961, exploded October 22, 1980



Bethlehem Steel (artillery shells),

(Deemers Beach)

30

EVENING JOURNAL

A GANNETT NEWSPAPER / WILMINGTON, DELAWARE / WEDNESDAY, OCTOBER 22, 1980 / 110TH YEAR, NO. 25 / 25 CENTS

TRIUMPH

Phillies enter record books as baseball's world champs



By Larry Hogenack and Maria McCree

It started raining in the bottom of the eighth inning at the Stadium last night as the Philadelphia Phillies entered the record books as the first American League team to win the World Series. The victory was capped by a home run by the Phillie Phanatic, the mascot of the team, who hit a home run in the bottom of the eighth inning to give the Phillies a 3-2 lead. The Phillies won the game 4-2 over the Cincinnati Reds in the seventh game of the series. The Phillies' victory was a historic moment for the franchise, which has won the National League pennant twice but never the World Series. The team's manager, Charlie Finley, said that the team was "overjoyed" with their victory. The Phillies' victory was also a triumph for the city of Philadelphia, which has been a baseball town since the 1930s. The team's fans celebrated in the streets, and many people gathered to watch the game. The Phillies' victory was also a triumph for the sport of baseball, which has been struggling in recent years. The team's victory was a reminder of the excitement and passion that baseball can bring to its fans.

TRAGEDY

Thunderous chemical blast leaves 5 dead, 28 injured



By Larry Hogenack and Maria McCree

A thunderous explosion at the Amoco Chemical Corp. plant in New Castle, Del., on Tuesday left five people dead and 28 others injured. The explosion, which occurred at 6:31 a.m., was the largest in the history of the plant. The blast was caused by a runaway reaction in a reactor. The explosion was heard for miles around. The plant is located on the shore of Delaware Bay. The explosion caused a large fire to break out, and a plume of smoke and debris was seen rising into the air. The fire was quickly extinguished, but the damage to the plant was extensive. The explosion also caused a large amount of material to be ejected from the reactor. The material landed in the water, and a large fire broke out. The fire was quickly extinguished, but the damage to the water was extensive. The explosion was a major disaster for the plant and the community. The cause of the explosion is still under investigation. The plant has been closed, and the area around the plant is still under quarantine. The explosion was a tragic event that has left a lasting impact on the community.

Victory city erupts with joy

By Terry Sivinske

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Fleeing flames, debris, residents count blessings

By Ralph G. Moore and Nancy Keaney

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969

Cast ballot at schools

Polls will be open until 8 tonight in the New Castle County School District for a referendum on a proposed tax increase of 4 1/2 cents per \$100 of assessed value.

News inside

Debate scheduled - Minority Center and Robert Reagan will debate each other tonight in Clearland, Md.

Unannounced - Calista Salvage working at the location and family planning, but it is not sure when the show will be announced. A.B.

Goals and goals - A guide to Halloween activities, including haunted houses and other traditions. C.B.

2021 OCT 22

Evacuees return from shelters

Continued from A1

Everyone waiting at the barricade had felt or heard the blast, or both.

Some of those at the barricades had come from Dobbinsville, a collection of older row houses, which was one of the areas evacuated by firemen and police. A few spent the night at a emergency shelter set-up at William Penn High School.

In Dobbinsville this morning, evidence of the power of the blast could be seen. In one home, the whole window frame was dislodged. In another, the broken window and torn screen revealed a house plant hanging in a pot, wilted from the cold air blowing through the broken glass.

One woman said she was in her kitchen when the blast went off, breaking her picture window in the living room where her husband was sitting. She said she kept shouting to her husband, asking what had happened, but he just kept saying, "Oh, my God, Oh, my God."

She started around to the neighbors to see who else had damage; but one man told her, "The hell with

the glass. Get out of town." She did, along with several hundred other area residents, who were evacuated because of fear that there might be further explosions.

The woman did not want to give her name.

Kay Reeder, who lives on Center Street, said she was half asleep on her living room couch when the explosions broke every window in the front of her house. She had just finished replacing one window her husband had broken. She said she thought at first he had broken the window again.

This morning Mrs. Reeder stoically swept the broken glass from her sidewalk as smoke still rose from the plant. She said that living next to such plants as Amoco and the Getty refinery, "You just take it for granted that sooner or later they're going to go up."

Don McLaren, an employee of Larmore Inc., was working at the moving company's warehouse at 1 Bellecor Drive, about 6:30 p.m. "It was like an airplane had dropped on the roof."

Roberta D'Anna, 16, was in a hurry at 7 last night as she spoke of the blast from her home at 221 Grantham Lane, just across the road from the plant. "I came back to get my camera. We have to get out of here fast. A couple more tanks are about to go."

Miss D'Anna, a junior at William Penn High School, was sitting in her living room doing her homework earlier in the evening. "I heard a sizzling sound, then an emergency signal. Then came the blast." The explosion blew in the front door of the D'Anna home, ripped down a screen door and shattered all the windows in the house.

With her in the house were her mother, Rosalie D'Anna, and her grandmother, Elsie D'Anna. "My mother was hit on the head with the broken glass. She was taking a shower," said Roberta D'Anna.

Robert Arnold, 33, of Collins Park, was unloading propane tanks from a railroad car at the plant when he also heard the sounds that preceeded the explosion.

"I heard a hissing sound, and then a bang, and a hiss and then I saw gas and heard the alarm. When you hear

everything off, so I was running up the steps to shut the car off, when I heard the explosion."

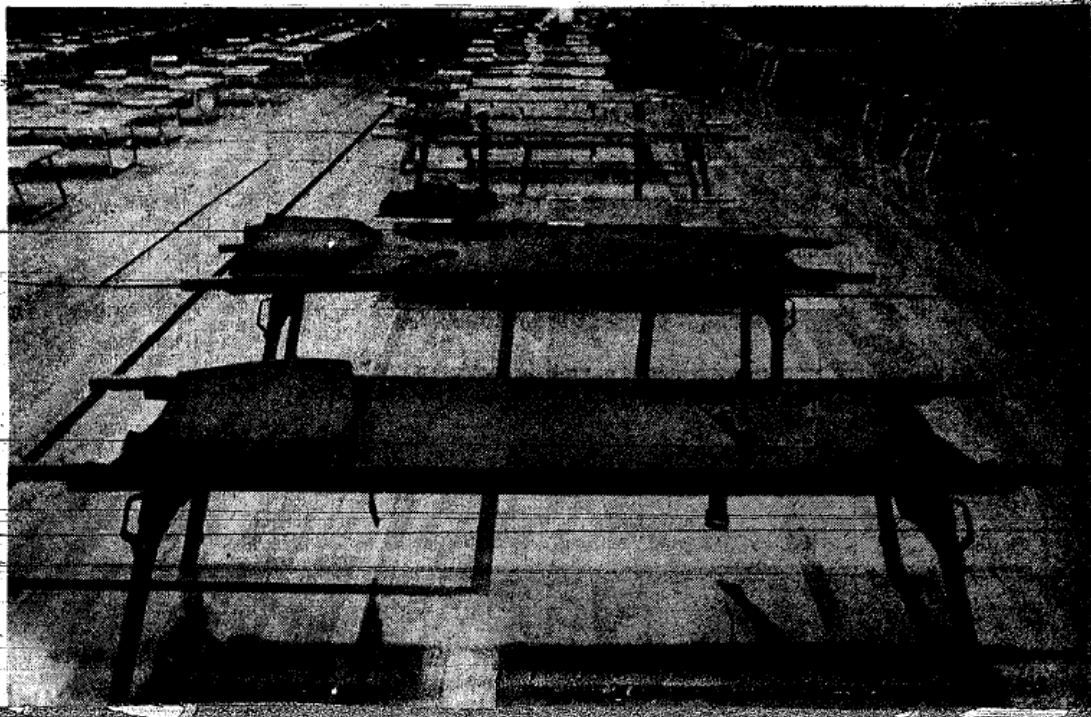
Arnold was knocked down, but not seriously hurt. He was treated for smoke inhalation at St. Francis Hospital and released.

"It's a miracle," that his injuries were so minor, Arnold said in an interview at the hospital. The face of his digital watch was scratched by flying debris, but he received no wounds.

Man and tank, Robert Arnold said.

In Dobbinsville, his father, Lester Arnold, also was lucky. The blast broke most of the windows in his place at 639 Clymer St., but Arnold was unharmed. He seemed annoyed at being ordered to leave his home. "The cops were swarming over the place," he said.

Carol McNulty, who lives still further away at 52 Juniper St. in Washington Park, was ready to leave for good. She had worried about living even a half mile from the plant. "I don't like it being back there."



Cots were set up last night at William Penn High School for people evacuated after the Amoco explosion.

Staff photo by Ron Cobble

Officials list explosion's casualties

The five men killed in last night's explosion and fire at the Amoco Chemicals Corp. plant south of New Castle were identified this morning by an Amoco spokesman as Charles F. Bohl of Rising Sun, Md., Richard B. Davis of New Castle and Joseph E. Tussey of Elsmere, all process assistant operators; Thomas L. Freeland of Wilmington, a maintenance mechanic, and John J. Reynolds of Newark, a shift superintendent.

No ages were immediately available.

Four men were dead on arrival at the Delaware Division of the Wilmington Medical Center last night, but only Reynolds could be identi-

fied. The others were burned beyond recognition and will have to be identified by the medical examiner, according to Max Q. Elder, director of public affairs.

Under New Castle County's disaster plan, a doctor on the scene sorted victims according to their injuries, sending the most seriously injured to the Delaware Division or Crozer-Chester Hospital in Upland, Pa. Riverside Hospital was put on alert, but received no patients.

In all, twenty-eight were reported injured.

State police helicopters transported two men to Crozer-Chester last night. They are: George Arrington, 49, of New Castle, in critical

condition in the intensive care unit this morning, and Robert Duval Sr., 42, also of New Castle, in critical condition in the burn center.

Those admitted to the Delaware Division with burns and other injuries, and listed in serious condition this morning, were William L. Lysinger Jr., 39, of New Castle; and Francis H. Chudzik, 42, Walter S. Mateja, 62, and John R. Shupe, 39, all of Wilmington.

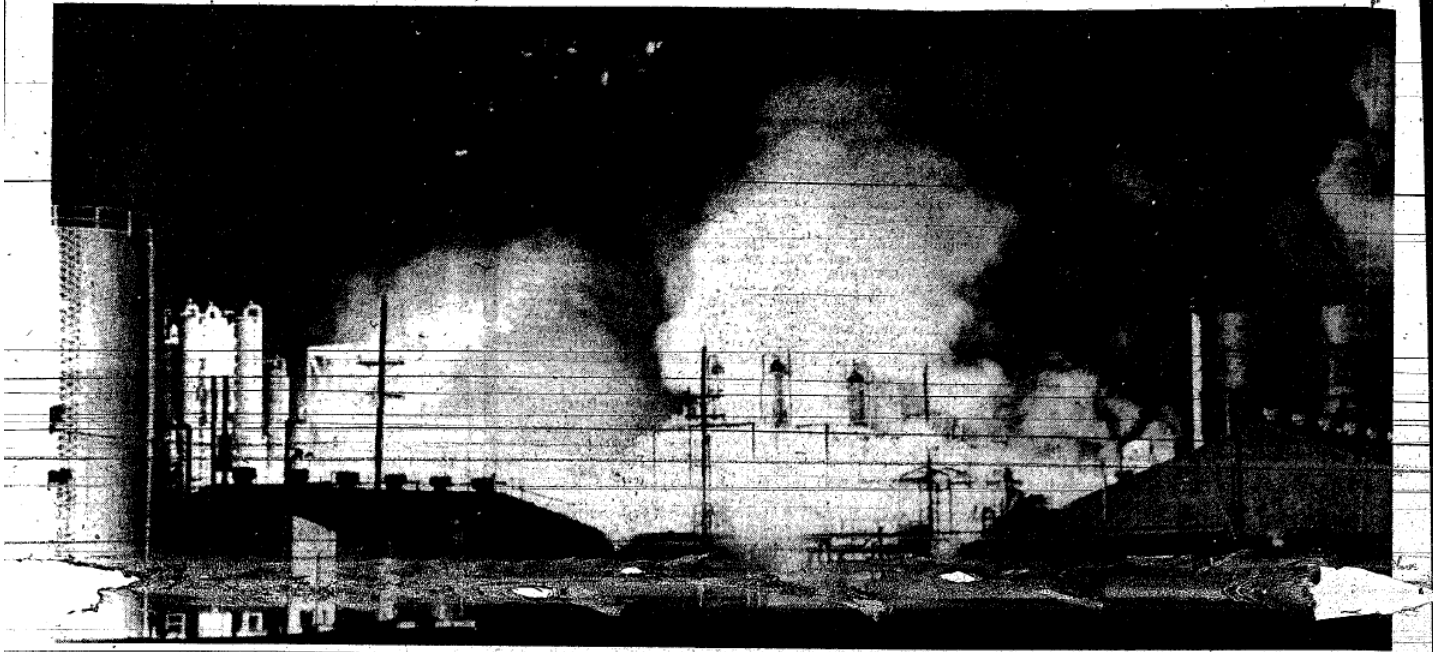
Also admitted to the Delaware Division, but in good condition this morning, were James A. Crossan, 29, and Lewis E. Lynch, 33, both of New Castle; Michael Lucas, 39, Smyrna; Elmer S. Lynch, 56, and Zoll C. Collins, 41, both of Newark;

Charles K. Wakeling, 46, Wilmington; Jerry Parker, 31, Dover; and Earl G. Swanson, 37, Millington, Md.

Treated and released from the Delaware Division were: Gerald Hope, Alton Drummond, Ronald Smith, Robert Grady, Rick Austin, Bill Karia and Rudolph Keller. Ages and addresses were unavailable.

Treated and released from St. Francis Hospital in Wilmington were: Clifton Clark, 35, Bannockburn, Ill.; Daniel Coveill, 32, Coates Park; Douglas Lea, 31, Delaware City; William Jordan, 48, New Castle; Robert Arnold, 33, Collins Park; and Ronald Delsordo and Joseph Gonzo, for whom ages and addresses were unavailable.

Champagne drowns years of disappointment



Fire lights the sky after an explosion last night at the Amoco chemical plant near New Castle.

Explosion's damage extended for miles

Continued from A1

The dead, police said, were found in the immediate area of the blast. The early count of six dead once rose to seven and then was finally revised to five.

Early today, Kent Carson, the plant's employee relations manager, said that until last night the plant had operated for more than 800 days, without having an injury that forced a worker off the job.

Delaware 9 from Dobbinsville, on the north, to Federal Lane will probably be closed all day, state police said. While the fire raged last night, portions of U.S. 13 and Delaware 273 within a mile of the plant were shut for more than an hour.

About 600 residents of Dobbinsville, Shawtown and Washington Park were evacuated shortly after the explosion because officials were worried about secondary explosions. Many of the evacuees were taken to the nearby William Penn High School and George Read Middle School, but all had returned to their homes by about 7 this morning.

Also evacuated was the U.S. Postal Service mail-sorting building at Hares Corner, Wilmington. Postmaster Edward A. Biegel said 20 workers were ordered out of the building at 9:30 p.m., until about 2:30 this morning. As a result, mail deliveries today throughout Dela-

ware will be lighter than usual. Biegel said his night shift will come in early tonight and that deliveries should be back to normal tomorrow.

State police said the explosion may have occurred in a propylene tank in processing area of the plant. However, a worker said the explosion occurred in a reactor in which propylene, a highly flammable gas, is mixed with other chemicals to make polypropylene pellets.

No toxic fumes from chemicals at the scene were released, police said.

At the Delaware Division, Robert Arnold said he and his fellow workers considered him one of the luckiest men alive because he was unloading chemical tanks in a building less than 100 yards from the explosion.

Arnold, a small thin man, said he heard a whistling sound and then an alarm went off. "I went up top and was ready to shut it off when I was blown off the platform. I got up and went to put the sprinkler system on. I rounded the bend, walked out the door and that was it," he said as he threw his hands up in the air.

Arnold was taken to St. Francis Hospital, and when he was released a few hours later, he went right to the Delaware Division to find out about his co-workers. At the emergency room entrance he met a group of Amoco employees from

nearby plants who had brought relatives of the injured men to the hospital and came to find out who were among the injured.

"And you were right in there?" asked one. "It's a miracle you're still here. And you walked away?"

"I know, I know," he sighed and then walked off to find out about the ones who weren't as lucky as he was.

Ruth Lynch, sister of Lewis Lynch, one of the injured workers, had just visited her brother and was sitting outside the busy hospital last night almost in a daze.

He said he was going on break when it happened. He and another worker were in the canteen. He said it happened so quick. They went through a door to get their fire coats. When they opened the door, it blew him up to the ceiling, right out of his boots. . . . They crawled out to the highway and met a lot of other workers who didn't know what happened, but were just trying to get away.

Miss Lynch said her brother told me when it went off the air was burning hot. He said he didn't see anything. He felt tremendous heat and then saw a lot of debris falling all around him. That's how he injured his arm, something fell on him.

Amoco spokesman said the company would conduct its own investigation into the cause of the

catastrophe.

James O'Leary, an Amoco spokesman from Baltimore who was on the scene after being called away from a meeting in Houston, Texas, last night, said, "It's going to be several days before anyone's got anything pieced together."

The fire was visible for miles, and other fires broke out in the marsh grass around the plant.

Two state police helicopters transported the injured to nearby hospitals. One crew airlifted injured workers to the burn center at Crozer-Chester Medical Center in Dripland, Pa., and returned with burn specialists from the hospital. A triage unit — where the initial emergency diagnosis of the seriously injured patients is made — was set up at Crown Zellerbach Corp. on Delaware 9 near Amoco.

The explosion rocked buildings as far north as Hockessin, and shook the ground in Salem County, N.J., across the Delaware River. Motorists in Pennsylvania, N.J., parked their cars along the river to watch the black smoke rolling northeast from across the river.

A large plate-glass window, worth about \$800, was blown out of the Z Mart store on Maryland Avenue in Richardson Park, about six miles away, said Bill Buccell, the store's grocery manager.

Lawrence Petrucci, of 1624 W. 10th St. in Wilmington said he was

standing in his garage at the time of the explosion and the blast "rocked me from side to side."

Amoco employs about 300 people, with about 260 working days at the plant. The day workers reported to work this morning and many would be assigned clean-up duties, O'Leary said.

Officials said the polypropylene resin manufactured at the plant is used in plastic products for autos, housing, tires and appliances.

Cpl. Barry Beck, a state police spokesman, said the fire started in the processing area of the plant and spread to the finishing building.

From there, spot fires ignited by hot fragments of metal were propelled into the outlying marsh between the plant and the community of Dobbinsville.

Employee Arnold claimed the explosion occurred near a propylene tank, inside a high-pressure chemical reactor in which plastic pellets are made.

At 10 p.m., Beck said, the concern seemed to be six large propylene storage tanks threatened by heat. "What they must do is cool these tanks down," he said, "plus there are several tank cars on the [railroad] spur [around the plant]." Beck estimated the size of the tanks at 30,000 cubic feet.

Police said the ends of the horizontal storage tanks could blow off in an explosion, hurling huge chunks

of metal for as far as 2 1/2 miles.

By 11:30 p.m., firefighters said the chance of another explosion was slim.

Detective Gerald Montgomery said the explosion occurred a moment after an alarm at the plant sounded. "No sooner did the alarm go off when the explosion occurred," he said. Montgomery said the tanks of propylene are "like bombs."

Police, fire marshals and agents of the U.S. Bureau of Alcohol, Tobacco and Firearms were conducting investigations. A 20-member ATF "national response team" was being assembled from throughout the nation and would be on the scene today, a fire official said. Benjamin Roy, state fire marshal, was heading the state investigation.

Fire officials today said they had no reason to suspect arson.

Contributors

Staff reporters Harry Adams, M. Roy Adams, Buzzy Albert, Sandy Dennison, Jerry Hager, Jane Harriman, Peter Harris, Nancy Kestler, James McBride, Paul Milford, David L. Preston, Richard Sanz and Steve Marshall contributed to the stories on the explosion at the Amoco plant.

Families of 5 killed in blast had lived each day with fear

By Anita Manning

Staff writer

"I never really thought it would happen," said Carol Davis, "but whenever there would be a noise, it would be the first thing I would think about."

Mrs. Davis, whose husband, Richard, was one of five men killed in Tuesday's explosion and fire at the Amoco Chemicals Corp. plant south of New Castle, was talking about the fear she and other wives of those killed in the blast felt for their husbands on the job.

Davis, 41, was born in Philadelphia and had worked at the Amoco plant for 10 years as a process assistant operator.

Mrs. Davis was inside their home at 102 E. Lunenberg Drive, Jefferson Farms, just after 6:30 Tuesday night, when she heard what she thought might be thunder.

"I went out to call my little girl," she said. "Then I saw the big smoke."

She said she gathered her three daughters, Dawn E., 15, Karen L., 13, and Laura A., 9, and went to a neighbor's home.

"We listened from a distance from a found out."

Adri Bohl, the wife of Charles F. "Chuck" Bohl, said she had always been aware of the danger her husband faced in his job as an assistant operator at Amoco.

"Any time there are reactors and propane gas involved, there is danger," she said, "but you never think about it."

Bohl, 46, of Octoraro Lake, Rising Sun, Md., worked at Amoco for 10 1/2 years. Like Davis, he grew up in Philadelphia. The two attended Lincoln High School there, but their wives said they had never mentioned knowing each other.

Bohl attended art classes at the Philadelphia Museum of Art after high school, Mrs. Bohl said, and he enjoyed painting and doing artwork for their son, 11, and daughter, 8.

"He liked to make sculptured Halloween masks for the children," she said. "He was in the middle of making one for my son."

Relatives and friends gathered around the families of the men yesterday, offering comfort and support.

At the home of Thomas Lee Joseph Freeland, 42, of 2202 Grace Road, Hillendale, near Claymont, the visitors tried to console Freeland's wife, Rose Ann, and children.

Freeland, who grew up on Green

Street in Claymont, graduated from Claymont High School in 1958. He worked as a maintenance mechanic at Amoco.

John J. Reynolds, 55, of 212 Spruce Glen Drive, Meadowood, had worked for 19 years at Amoco as a shift operator. Kevin Reynolds, one of five grown sons of Reynolds and his wife, Mary, said his father was a "private person" who had a few close friends and a tight-knit family.

An Amoco employee who had worked with Reynolds, and sailed boats with him said, "You couldn't ask for a nicer guy."

Born in Elizabeth, N.J., Reynolds served in the Navy in World War II, his son said.

Joseph E. Tussey, 50, of 115 Olga Road, Elsmere, worked as a catalyst operator at Amoco for 19 years. He and his wife, the former Anna May Harrity, were "very close," according to Mrs. Tussey's sister, Catherine Johnson. "He was one wonderful person," Mrs. Johnson said. "He was a thoughtful, good family man, very close to his wife and his brothers and sister."

Tussey grew up on Wilmington's east side. He attended Wilmington High School and served in the infantry in World War II. He was discharged in 1944 with the rank of Corporal.

The couple had no children. Besides his wife, he is survived by two brothers, Raymond S. and William D., and a sister, Mary Tussey Craner, all of Wilmington.

Window repairs start after Amoco disaster

A New Castle city official has authorized a contractor to make emergency repairs to windows in Dobbinsville that were broken in the explosion at the Amoco Chemicals Corp.

For now, the money will come from federal block grant funds that had already been allocated for general home repairs in Dobbinsville, according to Michael J. Gallagher, community development coordinator for New Castle.

But Gallagher said he would ask the City Council to seek reimbursement from Amoco.

Gallagher said windows in about 40 of the 90 homes in Dobbinsville were broken. Windows were also broken in three Washington Park homes, but those residents will have to arrange for the repairs themselves because that area is not included in the grant, he said.

Gallagher said he did not notice any structural damage to the homes in Dobbinsville, a neighborhood of aging rowhouses.

Erwin Black
fine carpet fashions by Armstrong

Union cites staff cutback

Continued from A1

any comment would be "pure speculation."

Pavey said Amoco did not know whether a maintenance crew was at work on the gas pipe at the time of the explosion.

The fire, which began after the 6:31 p.m. blast, was brought under control by about 200 firefighters at 5:41 yesterday morning. By 7, nearly all of the 600 residents who had been evacuated were returning to their homes.

State Fire Marshal J. Benjamin Roy Jr. said pipes containing flammable gases were broken in the explosion. The gases — hexane, propane and propylene — "just helped to fuel or feed the fire," he said. At 7 last night, polypropylene pellets still were smoldering, he said.

Eleven of the state's 15 deputy fire marshals and 12 investigators from the East Coast offices of the U.S. Treasury Department's Bureau of Alcohol, Tobacco & Firearms were on the case, Roy said. Representatives of the U.S. Occupational Safety & Health Administration (OSHA) were also at the plant.

The plant manufactures polypropylene resin for use in plastic products for cars, homes and appliances.

Plant manager Albert E. Ruscilli said company officials recently had decided to spend about \$10.6 million to modernize the plant, located on River Road south of New Castle. That money could go towards repairing the plant, he said.

Ruscilli said most of the damage occurred in the finishing operations, where powdered material is con-

verted into plastic pellets.

The blast also damaged the water cooling system, and the plant is without the water it needs to complete any work in the polypropylene manufacturing process.

Dale Casseday, president of Local 8-732 of the Oil, Chemical and Atomic Workers Union, which represents workers at the plant, said yesterday he warned the company two years ago of possible safety problems because of understaffing.

"I wrote to Mr. [John] Swearingen, chairman of the board [of Amoco Chemicals' parent company, Standard Oil of Indiana] and advised him that the very thing that happened could occur because they were undermanning the plant," Casseday said. He said his letter warned that employee cutbacks could lead to an explosion. He wrote the letter, he said, after the company reduced employees from about 220 to 180.

Pavey said the company had no record of such a letter, and he expressed doubt that it had been written. Company records do show, however, that Casseday filed a grievance in April 1978, protesting cuts that had been made in manpower.

In his complaint, Casseday warned that the employee reductions in the processing and finishing operations could "increase the danger of a plant explosion," Pavey said. He refused to let a reporter read the company documents relating to the grievance.

After a series of meetings with Ruscilli, Casseday signed papers on Dec. 15, 1978, stating that he accepted the employee levels, Pavey said. If Casseday had been

unhappy with the arrangement, he should have taken the issue to an arbitrator, Pavey added.

State police said a figure of six or seven dead was given out at first based on inaccurate information that victims taken to the Crozer-Chester Medical Center in Upland, Pa., had died.

According to preliminary reports, most of the five dead men had been working in the cinder block control room — the nerve center of the polypropylene operation.

One of the victims, Joseph E. Tussey, a process assistant operator who lived at 115 Olga Road, Elsmere, was working overtime, co-workers said. Tussey normally worked on the day shift, with about 260 others. "Why he was working overtime, I don't know," a co-worker said.

The other dead men, in addition to Tussey and Freeland, were identified by Amoco as:

Charles F. Bohl, 46, Octoraro Lake, Rising Sun, Md.; and Richard B. Davis, 41, of 102 E. Lunenberg Drive, Jefferson Farms, both process assistant operators, and John J. Reynolds, 55, of 212 Spruce Glen Drive, Meadowood, a shift superintendent.

Twenty-eight were reportedly injured, with two at the Crozer-Chester Medical Center: George Arrington, 49, of New Castle, who was in serious condition in the intensive care unit last night, and Robert Duval Sr., 42, also of New Castle, in critical condition in the burn center.

Reporter Marta McCave also contributed to this story.

Faulty valve cited in Amoco blast

Gas cloud enveloped 2-man crew and ignited before they could flee

By Joe Trento
and Gail MarksJarvis

Staff writers

Investigators say a faulty valve caused the gas leak that led to Tuesday night's fatal explosion at the Amoco Chemicals Corp. plant near New Castle.

Five workers were killed and 28 injured in the blast.

State Fire Marshal J. Benjamin Roy Jr. said yesterday that the devastating blast occurred after the valve sprung a high-pressure leak. Roy said a gas cloud made up of an explosive combination of propylene, hexane and propane engulfed a nearby two-man maintenance crew and ignited before they could escape.

The two men, Thomas L. Freeland and John R. Shoupe, are believed to have been working on the valve or a connecting pipeline at the time of the leak. Freeland, 42, was killed and Shoupe, 39, was still listed in serious condition today in the intensive care unit at Delaware Division.

The explosion at the plant on River Road blew out windows in a five-mile area and the shock wave could be felt for miles.

Union officials and investigators were trying yesterday to find out

Over 200 file claims

Amoco Chemicals Corp. has hired a claims adjustment firm to handle damage claims resulting from the explosion Tuesday at its New Castle plastics plant.

The firm, GAB Business Services Inc. of Newport, received "a little over 200 claims" in its first 24 hours on the job, manager Richard Litchford said yesterday.

Anyone with a problem or complaint can call the firm at 999-0176, Litchford said.

The explosion shattered many windows in Dobbinsville, south of New Castle, and elsewhere. A New Castle city official authorized a local contractor to begin repairs in Dobbinsville with federal block grant money. New Castle City Councilman David Burroughs said yesterday that GAB will be billed for the Dobbinsville work. Others with damage claims should contact GAB directly, he said.

whether gas should have been blocked off from the line before the maintenance work started.

Employees familiar with maintenance procedures at the plant say gas lines normally are blocked off and purged of dangerous gases before maintenance work is done.

The procedure is considered a routine precaution required before a company safety permit can be issued, the employees said. Company policy requires that a safety

permit approved by a supervisor be issued before any maintenance work can begin, they said.

Amoco spokesman Paul Pavey refused to release any information concerning the safety permits or work orders covering maintenance done by Freeland and Shoupe.

Roy's investigators don't know what set off the gas cloud, saying it could have been a spark caused by a dropped tool or a cigarette.

"We may never know what set the fire off," he said.

Gas was supposed to be detected by an elaborate system of electronic and mechanical "sniffer" alarms. Roy said either no such automatic system existed or it failed completely Tuesday night.

Roy and other investigators are also trying to determine why the plant's water fire-suppression system was made useless by the blast, forcing firefighters to bring water in from the outside.

As the task force of local, state, federal and company investigators poked through the rubble yesterday, company employees said Tuesday's explosion was not the first incident of its kind at the plant.

Michael Joswick, who has worked at the plant since 1967, said he was present during two incidents where high-pressure leaks developed at the plant, which makes polypropylene, a plastic.

Joswick said the first leak in the fall of 1967 — when the plant was owned by Avisun Co. — required that a worker climb to the top of one of the reactor vessels where chemicals are mixed to install a wooden plug to stop a high-pressure leak.

See NO RECORDS — A10, col. 1

Marcello ('Mike') DiAllesandro worked at Amoco the day of the explosion. He was worried about other tanks exploding.



Born in 1943, came to New Castle via Canada in 1961 and immediately went to work at Amoco. The plant took oil byproducts from Sunoco to produce polypropylene pellets for pellets etc. Among his jobs was working inside reactors chipping product off beaters.

Deemer's Beach (1925-35)

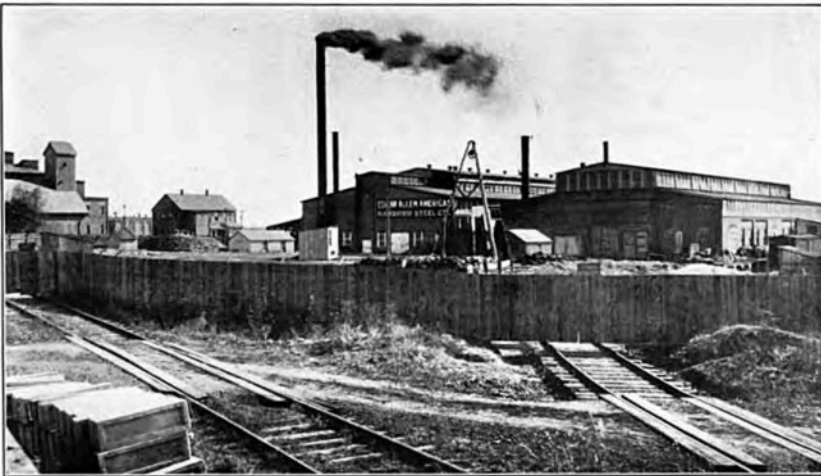


John S. Deemer (center holding straw hat) with friends and vacationers on boardwalk during summer of 1928.



Courtesy Hagley Museum and Library

'The Manganese' (AMSCO, American Manganese Steel)



EDGAR ALLEN AMERICAN MANGANESE STEEL CO.

Factory site

Waste dump



1909 – Tropenas Steel, later Edgar Allen, AMSCO, ABEX – closed 1986
Produced work-hardening manganese steel by Tropenas process used in railroad switches and brakes.

From "Men of Steel", by Hugh Ryan Jr., March 6, 1986

The presence of the American Manganese Steel Plant, as I knew it, had considerable economic effect on the New Castle area through the years. Many of us were clothed, fed put through school and lived on earnings from the sale of railroad frogs, steam shovel buckets, drag buckets, points, lips , links and the vast variety of steel castings fabricated here at New Castle. The molds were made by Roy White, Ed Cline, Dick McGrory, Lou Stidham and others, all working under the watchful eye of Grover Ingle, the foundry foreman. The castings would be shaken out and sent over to the annealing furnace where Ed McDaniel's team would don their asbestos suits and fasten the crane hooks to the pile of six or eight tons of cherry red steel. He would then guide Dominick Chirilli's crane over the water pool and signal "lower". The resultant steam explosion and flying water was a dramatic sight to witness.

The Plant was not an easy place to work as indeed no steel foundry is. It was physically demanding on its workers. The air was always dust filled and you breathed it. But somehow you had pride in associating yourself with this work. It was an invaluable experience working with men like Alex Garneski, Joe Medora, Ralph Divito, John Gilkey, Joe Armpriester, Joe Rossell, Harold Emery, Bill Dalby, Dominick DiSabatino, Fred Rush, Edgar Bowen, Mope White, Bill Denny, Grover Ingle, Harry Ingle, Chick White, Bill Payton, **Charlie Hewlett**, Joe Mullin, Frank Kelly, Tony Esopi, **Hughie Ryan** (Sr) , Ed Butler, Ed Cline, Horace Conover, Harry Gallagher, **Bill Peden**, Barney Williamson, Cliff Ivery, Francis White, Johnny Proud, Earl DiSabatino, Johnny McDevitt, **Mike Indellini**, Emmett Covelli, **Frank Yaccucci**, Johnny Hall, Claude Phillips, Norman Banks, Don Nichols and many others.







July 4, 1927

1927 One week after Lindbergh's flight to Paris, Bellanca's *Columbia* flew to Berlin



1928 Bellanca moved his plant to New Castle